Lectures ON DISEASES OF THE NERVOUS SYSTEM.

Delivered at the Westminster Hospital,

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LECTURE VII.—PART II.

BEFORE we proceed to speak of those general remedies which must form the most important part of any effective treatment for hysteria, there are one or two questions to be dealt with, as to certain classes of drugs which have enjoyed great favour at various times, both in the profession and (still more) outside it. These remedies are all of a stimulant nature, but they may be divided into three different classes: (1) there are simple stimulants, like carbonate of ammonia, given internally or applied (as smelling salts, with liq. ammoniæ fort.) to the nostrils, the whole intention of which is to, as it were, *startle* the nervous system out of a momentary collapse, arouse the action of a failing heart, or irregularly acting respiratory muscles; (2) there are the aromatic stimulants, represented by valerian, assafœtida, and galbanum, which, while milder in their general stimulant effects, are supposed capable of producing a certain special stimulus to the ganglionic centres in the abdomen, pelvis, and thorax; (3) there are stimulant narcotics, which, given in any but very small doses, produce only a momentary stimulation, followed (as the whole dose becomes absorbed) by a distinctly narcotic effect, involving a certain amount of paralysis of nerve function. Among the latter are the whole tribe of alcoholic liquors, and a variety of analogous fluids, especially chloroform and sulphuric ether.

I do not think that any physician of repute would now admit that any of these remedies could be considered as more than mere temporary palliators of distressing and occasionally alarming symptoms. The administration of ammonia, brandy, or ether in a single dose, for the purpose of arousing the circulation when there is *genuine syncope*, is obvious; but even here it is necessary to give you a caution, for an apparent syncope might turn out, on careful observation, to be a merely cataleptic loss (more or less complete) of consciousness, in which the source of the lowered pulse is not in any special weakness, whether nervous or muscular, of the heart, but in a highly peculiar state of the general nervous system, which, for the most part, requires to be treated by quite different remedies than pouring a stimulant into the stomach, although the application of smelling salts to the nose may be really useful. Then, again, the aromatic (and for the most part very nauseous) drugs—e. g., valerian, galbanum, assafœtida—may in some slight degree prove directly useful by counteracting the tendency to atonic flatulence—a symptom which is not merely distressing in itself, but not improbably aggravates the violence of hysteric convulsion; but in all likelihood the largest part of any useful influence they may exert is through the mind, as to which I shall have more to say presently. But as regards the more powerful stimulant narcotics, and especially as regards alcoholic drinks, there is much more to be said than this; for their unwise employment is too common among the ignorant public, and the results are altogether mischievous. You are aware that I have never hesitated to maintain the high value of alcohol as a medicine, and the necessity for giving it boldly in suitable cases of disease. But I have always told you that it is in the acute fevers and adynamic inflammations on the one hand, and in that kind of acute debility which is produced by large losses of blood on the other, that the occasions for such medication arise; and that it is wholly unsuited to the treatment of chronic and intermittent nervous affections, however striking the superficial air of debility which the subjects of these latter complaints may wear. And in the case of hysteria it is much more than a mere negative quality that attaches to alcoholic treatment that at all exceeds the limits of strictest moderation. There is something fatally deteriorating to hysteric patients in the influence of alcoholic narcosis, even in its slighter forms; and there is at least one very obvious way in which the evil effect is worked. Volition, in all its higher forms, is notoriously weakened by even those slighter degrees of alcoholic excess which merely produce a comfortable and somewhat lazy geniality, still more so by anything like pronounced intoxication; but the hysterical woman's will and self-control are, beforehand, so much enfeebled that what might be a trivial injury to a person in sound health and with an available stock of recuperative nervous power may to her be a serious mischief, not easily, if at all, to be repaired. It is, therefore, a most objectionable practice to give alcoholic drinks as a solace for the feelings of depression and misery to which hysteric patients are so frequently liable; and it ought specially to be remembered that wine or spirits should never be given them (unless in very exceptional emergencies) save in most moderate quantities *with* the regular meals. I have elsewhere tried to show, on physiological grounds, that for women of ordinary stature, and leading average lives, not more than three-quarters of an ounce of absolute alcohol (represented by about four ounces of sherry, or twice that quantity of the very lightest claret) ought to be allowed per diem; and so far from recommending you to allow a larger, I should advise you rather to prescribe a smaller, amount for hysterical patients. Oftener it will be best to limit them entirely to the use of light table-ale, of which an ordinary tumbler may be allowed twice a day.

The remainder of the treatment of hysteria may be comprised under two heads: (1) there are regulated physical exercises, intended at once to improve general nutrition and to drill the voluntary muscles to a high degree of co-ordination in movement; and (2) there are a variety of appliances—physical, intellectual, and moral—by which we can more directly appeal to and rouse the half-slumbering volition of our patients.

It is necessary, however, before entering on the consideration of these, which are by far the most important remedies for the hysteric disposition, to revert once more to the discrimination of the very different circumstances which are mainly influential, in different cases, in the evolution of this peculiar temperament.

There are two sets of causes which are respectively active in the most varying proportions in individual cases of hysteria—viz.: the internal, which arise out of the original nervous constitution; and the external, which consist in the influence brought to bear on mind and body from without. I shall not repeat the details which I have already given on this subject, but I call your attention to the following points. Very different must be our prognosis of the patient's future and our general scheme of treatment according as he or she falls under one or other of the following categories:—

There is the case of young persons born of exceedingly neurotic families, in whom hysteria, as it were, spontaneously explodes as soon as ever the organism encounters the strain imposed on it by sexual development and the rapid growth and consolidation which take place in later youth.

There is the case of patients in whom inherited temperament has exerted more or less influence, but this influence has been unnaturally exaggerated by unfortunate educational and other mental impressions.

There is a class of hysterical patients in whom there has been little or no hereditary influence at work, but in whom the bodily strength has been severely depressed by protracted wasting illness, or by the secondary effects of intense grief, anxiety, or other lowering emotions.

It will be our simplest course to consider first the form of hysteria which is least connected with original nervous constitution. Perhaps no class of patients suffer more unintentional injustice at the hands of friends and medical attendants than these. The word hysteria, once applied to their complaints, seems to banish from the minds of those who use it all just and accurate consideration of the real causes and true remedies for their state. "Hysteria," most unhappily, has become fixedly connected in the vulgar mind with the idea of sham, and under the influence of this notion real dangers are often overlooked, and a miserably

inefficient plan of treatment is adopted. Such cases as the following are not unfrequent:—A young woman, somewhat deficient in robustness of constitution, but of energetic mind and self-sacrificing benevolence, without a trace of the hysteric feebleness of will, is called by virtue of these very qualities to be the servant and helper of a whole family. Her life is consumed with burdensome trifles, and perhaps her hopes of marriage are frustrated by the mere fact that she has no time to think of her own interests. Nevertheless she bears up well, and does her work cheerfully until some serious physical illness attacks her. It is then that the accumulated influences of her past life begin to tell seriously. Instead of making a complete recovery, she remains, after the acute illness has passed away, in a state of great general depression; and now by degrees hysteric phenomena begin to develop themselves. The will, which was once so energetic, falls into abeyance, and the patient's sympathies, which once went freely out to those around her, are morbidly drawn inward to the contemplation of her own indefinite but most real miseries. There is not a single phenomenon of the whole hysteric tribe which may not be produced by such a train of circumstances; and I do not know a more melancholy or disagreeable spectacle than is afforded by the thoughtless injustice with which the friends of such a person will often at once confound her case with that of girls who have been pampered into hysteria by mere idleness and luxury acting upon a naturally feeble will. It is of deep moment to medical men that they should never share in such a mistake, which is not merely disgraceful in itself, but may produce the most disastrous results. So far is hysteria, developed under such circumstances, from being a trivial or simply tedious malady, that it is often the expression of a state of vital enfeeblement which may be the precursor of rapidly fatal organic disease; more especially it is likely to be followed by pulmonary consumption, under which the system will quickly succumb, if there be any hereditary tendency to that disease. One of the most pressing difficulties in these cases of hysteria from mere exhaustion is the almost total failure of appetite and digestion with which we have to contend. In many instances we find it nearly impossible to devise a scheme of nutrition which shall prevent the patient sinking lower, still less that shall restore her wasted strength; yet, unless we can encompass this object we shall not prevent a fatal result, or, at any rate, a most lingering illness. In commencing the treatment it will scarcely be necessary to insist on perfect repose of body, for the patient's strength is visibly unequal to the slightest efforts; but it may be most needful to impress on the friends the uselessness and mischief of foolish attempts to "rouse" her, which they are too apt to make. Having secured this object, our whole attention must for a time be directed to the task of improving nutrition by a skilfully assorted diet. On this subject it is impossible to lay down rigid rules, for repeated experiments can alone decide the kind of food which will best be accepted and tolerated. Two main principles should be borne in mind—(1) not to force too large a quantity of nourishment on the stomach at once; and (2) never to allow too long an interval to elapse without feeding, more especially at night, or rather in those early morning hours when the powers of life are naturally at the lowest ebb. It is not possible in these cases to limit so strictly either the quantity or the times of administration of stimulants as in other forms of hysteria; still it is best, as far as may be, to give a fixed quantity of wine, in divided portions, along with some other food, and to reserve the use of brandy for positive fainting, or very serious failure of the pulse. We may sometimes aid the restoration of stomach power by bitter tonics, of which the best perhaps is strychnia in doses of one-fortieth of a grain, combined with dilute mineral acid, or forty to sixty minim doses of Easton's syrup of iron, strychnia, and quinine. An important subsidiary matter is that of keeping up the heat of the extremities by artificial means if necessary. As soon as ever the stomach will bear it, cod-liver oil or Devonshire cream should be administered, or a useful formula in some cases is the old-fashioned rum-and-milk given in the early morning. The procuring of sleep is sometimes a very delicate and difficult matter; as far as possible, it should be effected by the administration of food and a little wine rather than by the use of any decided narcotic. Of the latter remedies, however, the combination of bromide of potassium (fifteen grains), and extract of hemp (half a grain), is perhaps the least objectionable. You must wait for a considerable restoration of strength before submitting the patient to the fatigue of a journey; yet, as soon as this can be borne, her removal to a bracing atmosphere (seaside or high table-land) will be likely to do great good.

Let me pass now to the treatment of quite the opposite class of hysteric patients; those, namely, in whom hysteria is mainly the expression of an inherited neurotic temperament, distinguished by natural feebleness of volition and self-control. In such patients the explosion of positive hysteria may be brought about by the veriest trifle, but is most commonly the result of the organic disturbance induced by the advent of puberty. In these cases, if we see them early enough, it is of comparatively little moment what special direction the phenomenon may take—whether the tendency be towards the ordinary "fits," or to weakness of one or more limbs, or to the development of somnambulism or catalepsy, &c. Of such subsidiary measures as the careful prevention of constipation, and the insistance on the limitation of the hours of sleep, the avoidance of too heavy bed-clothes and so forth, I have already spoken. The two main points which should engage our attention are the strengthening of enfeebled volition and the elaborate exercise of muscular co-ordination. In attempting to train the will to a higher degree of efficiency, there are several ways in which we may go to work. The first and most absolutely important measure is to remove the patient from the atmosphere of injudicious sympathy with which she is too commonly surrounded; yet even this must be done with great judgment. It would be very foolish to fly to the other extreme—of unkind harshness. What we above all things need is a kind but thoroughly business-like and unsentimental domestic management. It is but rarely that this is to be found in the patient's own family, and I entirely agree with the opinion of Mr. Carter, endorsed by that of Dr. Reynolds, that the first requisite in cases of any severity is removal from home influences and familiar surroundings, to the care of some person of decidedly superior intelligence and experience in the domestic management of such patients. It is extremely surprising to see the vast improvement which this single measure, without any other specific treatment, will often effect; but such good influence may be indefinitely strengthened if those who have domestic charge of the patient possess the tact and ability to rouse in her the feelings of emulation, especially that kind of emulation which is blended with the desire to do good to others. I cannot enter here upon the complicated considerations which arise with respect to moral education; it is enough if I hint that the influence of noble example, rather than elaborate sermonising, is likely to be useful: and that no good whatever is likely to result from an emotional cultivation of the spiritual nature, since the natural tendency of this, in feeble minds, is towards a concentration of the thoughts upon self, the very thing which we wish to avoid.

In cases where the apathy of volition is extreme we may have to take into consideration the propriety of adopting some of those measures of *surprise* which operate through the production of mental shock. This is a far more delicate question than is sometimes thoughtlessly supposed. To hear many persons talk, one would suppose that it was only necessary to submit these hysteric patients to a severe course of shower-baths, or to hurt them a good deal with an electric machine, in order to place them in a way of rapid recovery. I beg you to dismiss all such crude ideas from your minds. The nervous surprise effected by the shower-bath is good only when and in so far as it arouses the skin circulation to reaction, just as would be the case in persons who are not hysterical; and the use of electricity at all as a mere terror or punishment is a pure barbarism. It is only when some of those definite lesions of sensation or of muscular movement already specified exist that we can hope for any good from electricity; and, on the other hand, its ill-timed use has many times done the greatest mischief. And, if we turn to those great impressions which have sometimes been effected by powerful moral shocks, it must be owned that we see but little to encourage us in the hope that these can be beneficial, except when they occur spontaneously, and even then it may be doubted whether they are not as often mischievous as useful.

I must close this lecture—too short for completeness, yet already inconveniently long—by some remarks on the important subject of physical training in its widest sense. Not to dwell on the obvious fact that an adequate amount of bodily exercise is highly necessary to a good state of nutrition and strength, I must insist on some more exact details of management. Mere monotonous walking exercise, though never so punctually taken, goes for very little. It is most desirable that the muscular system should be trained in an elaborate and varied manner. You will perhaps think that such accomplishments as singing and pianoforte playing should have been mentioned, if at all, under the head of mental training; but in truth the sustained attention necessary to produce the accurate co-ordinated movements which these exercises require is most directly useful to the nervous health. The training, however, ought to be severe and complete, and by no means directed to the cheap acquirement of a trumpery accomplishment, which may just serve for display. The same thing may be said of dancing; the most varied figures and steps should be thoroughly taught, without reference to prevailing fashion, but with great insistance upon elegant completeness. Where these more expensive luxuries are out of reach, a great deal may yet be done by trained movements of the arms with dumbbells and clubs, and of the legs by the use of the skipping-rope; and at any rate a kind of dancing, rude in everything but in an accurate following of the rhythm of music, may always be taught. Of horse exercise, unluckily out of the reach of the multitude, it is useless to give any recommendations. A finer training, both of the muscular and nervous system, and also of those qualities of courage and vigilance which are so opposed to hysteric languor, it is impossible to imagine. One more exercise we may name, which will be perhaps more available for the many in future than at present, is swimming; where the bodily vigour is sufficient, it would be difficult to mention any kind of training which is more likely to exert a beneficial influence in counteracting the disposition to hysteric feebleness and langour. Let me warn you, finally, against the common mistake of urging any of these physical exercises to the extent of severe fatigue; you would thus disgust and enervate, rather than brace, the nervous and moral tone of your patients.

Lectures
ON
INTRA-UTERINE MEDICATION IN THE TREATMENT OF CHRONIC UTERINE CATARRH.

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LECTURE II.

GENTLEMEN,—In my last lecture I described to you the class of cases in which I had found intra-uterine medication serviceable, and some of the modes in which it has been employed. To-day I propose to tell you of the method I have myself adopted, and which a considerable experience convinces me is the most efficacious, as well as the most easily applied. It consists in applying the remedial agents in a fluid form to the interior of the cervical and uterine cavities by means of swabs. For this purpose I have had constructed a series of uterine probes, made of a soft metallic extremity, 2½ inches in length, corresponding to the ordinary measurements of the uterine cavity. These are made as fine as possible, and they are considerably less bulky than an ordinary uterine sound, so that when wrapped with cotton wool they are sufficiently small to pass readily through the os uteri.* They are attached to box-wood handles 9 inches in length, so that there is no difficulty in working with them through the speculum. The flexibility of the probes is of essential importance, as it enables us to bend them to the exact shape of the uterine cavity, just as

we do the uterine sound; and thus intra-uterine medication can easily be used even in cases which are accompanied by the most well-marked ante- or retro-flexions of the uterus, without the necessity of first replacing the flexion, as in other methods of treatment. I have, in fact, constantly treated cases of this kind without any attempt at altering the abnormal position of the uterus, and found that this has gradually disappeared as the uterus has assumed a more healthy condition; thus effectually showing that the flexion does not cause the uterine catarrh. Although I have done this, I by no means wish to be understood as recommending no attention to be paid to concomitant flexions in cases of the kind. On the contrary, the cure will generally be materially assisted by properly adjusted pessaries worn in the interval between the intra-uterine medications. Formerly I was in the habit of using probes of whalebone, which had a certain elasticity, and could be made very slender. These I have now quite discarded for the probes of flexible metal, on account of the property the latter possess of retaining the shape into which they are bent. The first step is to wrap the probes smoothly and evenly with cotton wool, and this requires some little practice to effect satisfactorily, the object being to surround the probe with a fine layer of wool so smoothly applied as to add but little to its bulk, and yet so firmly as to avoid all risk of its being detached when used. This is best done by taking a very small quantity of fine cotton wool, which is teazed out and flattened between the hands until it forms a layer of uniform thickness. The probe is then dipped in water to cause the wool to adhere, and then is wrapped round by rotating the handle, while the metallic portion with the layer of wool is held between the finger and thumb of the left hand. Two or three trials will enable you to do this easily, and when it is well done the cotton adheres so firmly that you will find it impossible to remove it unless by cutting it off, and so smoothly and evenly that the probe with the cotton applied is hardly thicker than it was before. If, however, it is clumsily and badly done, you may defeat your own object, by making the probe so bulky that it will no longer enter the os uteri. It is well to mount several probes in this way, some being required to wipe out the uterus and remove the adherent discharge, which might prevent the remedy coming in contact with the mucous membrane, and one which is dipped into the fluid application to be used.

We next expose the cervix by the speculum, which may be of any form we are in the habit of using. I confess my own preference for the ordinary Ferguson's glass speculum with a bevelled extremity, partly because none can equal it in illuminating power, and partly because there is a certain advantage in fixing the cervix in the extremity of the speculum. When the duck-billed or bivalved speculum is used the uterus is so mobile as to increase the difficulty of passing the probes satisfactorily. The first step is to clean the cavity of the cervix and uterus with a dry probe. The discharge will generally be found to have that peculiar tenacity which is so characteristic of cervical leucorrhœa, and it may be necessary to use more than one probe before it is removed. If we have ascertained the exact direction of the uterus, and bent the probe to correspond with its axis, taking care to pass it in accordance with it—for example, with its concavity backwards if it be retroflexed—we shall have no difficulty whatever. I must here repeat what I have before said, that the os is invariably open and patulous in cases suitable for this method of treatment, a condition which materially facilitates the necessary manœuvres. A little difficulty may be experienced in getting the point of the probe through the external opening of the cervical canal, or rather in finding it, but none in passing it onwards

* These probes are manufactured by Matthews Brothers, Portugal-street, Lincoln's-inn-fields.

when this has once been entered. The utmost gentleness must be used, and if we meet with any difficulty it is better to desist, and certainly we should never permit ourselves to overcome the obstruction by force. In fact, the mounted probe should be coaxed into the cervical canal, never pushed in, just in the same way that we pass the male catheter when it does not enter readily. As a rule you will find it perfectly easy to perform this little operation, much easier than it is in most cases to pass the uterine sound. You will constantly find that as a case improves under treatment, as the catarrhal discharge lessens in amount, and the patient's sufferings diminish, so does the difficulty of passing the probes increase. When this is found to be at all great the case will usually be so much improved as to render it no longer necessary to pursue the intra-uterine medication.

The cavity of the uterus being wiped out with one or more dry probes, a probe dipped in the fluid to be used (the superfluous moisture being first wiped off in the neck of the bottle, so that none may run into the vagina) is passed like the others, and moved gently about so that the uterine mucous membrane may be thoroughly coated with the application. Then, if there be extensive abrasion or a granular condition of the cervix, this may be swabbed over with the fluid, and the operation is finished. If the manipulations I have described be performed gently and carefully, as they ought to be, they are practically painless; nor does the application itself produce any suffering. Of course, if they are done clumsily and roughly the patient will be hurt, just as she would be if the uterine sound were passed by a bungling and inexperienced hand. You may depend upon it, however, that if you produce pain the fault is yours. I prefer that all this should be done when the patient is in bed, and that she should rest quietly for some time afterwards; but I have constantly been in the habit of treating such cases in the out-patient room, and have now done so for several years, and no case has come to my knowledge in which any ill-effects have followed. I am justified in insisting on my experience on this point, because the opponents of intra-uterine treatment ground their objections on its supposed risks and hazards; and if I have never yet met with a case in which I have had the least reason to regret using it, it is surely no groundless assumption to assert that these dangers are purely imaginary, provided always that the cases are judiciously chosen, and the necessary manipulations properly performed.

With regard to the particular application to be used there is much difference of opinion. A strong solution of nitrate of silver, a saturated solution of tannin in glycerine, strong tincture of iodine, a solution of chromic acid, and even fuming nitric acid, have all been used, and are all, no doubt, more or less useful. I have tried them all, except the last, but I have found a strong solution of carbolic acid so immeasurably superior in its effects to them all, that I now use nothing else, and have every reason to be satisfied with it. The solution I use is prepared as follows:—Just sufficient water is added to the pure crystalline acid to keep it in a permanently fluid state, and the liquid so formed is a thick syrupy fluid of a pale pinkish colour, containing eighty parts of acid to twenty of water. To this I add an equal quantity of glycerine. I have often used the pure fluid carbolic acid prepared as above, and still constantly apply it to the exterior of the cervix when that is extensively abraded; but for the interior of the uterus I prefer to dilute it with glycerine. The effects of the carbolic acid are really remarkable, and may readily be watched on external abrasions. The slighter forms of these may often be healed by a single application, while even the worst kinds of granular erosion will be benefited by one or two applications far more than by double or treble the number of dressings with the solid nitrate of silver or tincture of iodine.

There are certain properties, too, possessed by carbolic acid, which render it preferable to all other caustics as an intra-uterine application. Neumann, of Vienna, has shown that when applied in a tolerably concentrated form, such as I use, it causes the tissues to shrink and mummify, but they never swell; nor does it ever produce an eschar as do the stronger caustics, such as potassa fusa, the acid nitrate of mercury, or even nitrate of silver. We can, therefore, use it freely without any risk of producing contraction of the canal of the cervix, a result which has followed the use of other agents, and which is said to be one of the objections to Courty's plan of using the solid nitrate of silver. Certainly no case has come under my observation where the slightest approach to such a result has followed the use of carbolic acid. I have no wish to depreciate other agents which are used, many of which are no doubt very efficacious, but inasmuch as I have never yet met with a case which has resisted the application of the carbolic acid, I have practically come to limit myself to the use of that alone.

With regard to the frequency with which the application should be repeated, I think that it should never exceed once a week, less often in slight cases, always taking care to have three or four clear days before the expected advent of a menstrual period, and the same time after its cessation.

One practical point is worth remembering, as ignorance of it might lead to disappointment. It not unfrequently happens that the first, or even the first two, applications are followed by an increase rather than by a diminution of the discharge. This is probably due to the unaccustomed stimulation of the diseased mucous membrane; and it is merely a temporary phenomenon. Almost immediately after the second dressing the discharge begins to diminish perceptibly; while the external abrasions, if any exist, assume a more healthy appearance, and soon entirely disappear. Very soon also there is a marked change for the better in the general symptoms; the backache and general symptoms become less constant and distressing, the general health improves, and the menstrual periods, which are frequently over-abundant, become less in amount and duration. This improvement, in favourable cases, goes on steadily until the patient is quite restored to health. The length of time during which it is necessary to continue the intra-uterine applications varies, of course, in different cases. Sometimes one or two have sufficed to effect a cure; at others, in cases of long duration which have become thoroughly chronic, it may be necessary to continue the treatment for many consecutive months. It is impossible to lay down precise rules on this point; but I consider no case of old-standing uterine leucorrhœa to be thoroughly cured unless the morbid discharge has completely ceased, until the cervix and body of the uterus have assumed a healthy appearance and feel to the finger, the general condition is so far improved as to enable the patient to follow her usual avocation, and the morbid patency of the canal of the cervix is no longer evident.

It would be easy for me to illustrate these remarks by a narration of many cases that have been under my care; but I fancy that they would not prove of much use. The class of cases are common enough; and it is only by actual observation for yourselves that you will be able to appreciate the value of the method of treatment I have been describing to you. I may, however, give you a brief summary of one or two to show you the benefit that may be expected; and I have selected them because they had each of them been, before they came under my care, patients at well-known hospitals in London. There they had been under the care of some of the most eminent gynæcologists in the metropolis; and it is, therefore, certain that all that the best and most judicious treatment (excluding intra-uterine medication) could do for them had been done, and yet their state had been but little improved.

CASE 1.—M. P——, aged thirty-three, the mother of four children, the youngest of whom is six years old. Ever since the birth of the last child she has been a constant sufferer from uterine disease, and has been incapacitated from any work. She has constant bearing-down pain, and is unable to walk at all. There is very abundant leucorrhœal discharge, of a transparent, gelatinous character. She is pale, thin, and cachectic in appearance. Menstruation is irregular, scanty, and extremely painful. She has been for six months a patient at a metropolitan hospital, but has not benefited from the treatment employed.

On vaginal examination, the uterus is found to be large, spongy in texture, and tender on pressure. The cervix is greatly hypertrophied, so much so that it cannot be embraced in the orifice of the speculum; it is covered with granular erosion, which bleeds freely when the speculum is passed. A large quantity of glairy mucus is seen issuing from the patulous os uteri.

For two months she was treated on general principles, one or two leeches being applied to the uterus, various medicines administered internally, and iodised cotton and

glycerine applied from time to time to the cervix. At the end of this period her general health had improved somewhat, but the uterine symptoms remained unchanged. Intra-uterine medication was then commenced with carbolic acid. After the third application the discharge was much diminished and the villous erosion of the cervix almost healed. After three months' treatment she was perfectly well and able for any work. The uterus and cervix were of normal size, and the uterine leucorrhœa had entirely disappeared.

CASE 2.—M. A——, aged twenty-six, a domestic servant, and unmarried, had suffered from uterine disease for four years, her prominent symptoms being constant pain and profuse discharge; and she is entirely unable to remain in service. On two separate occasions she has been an in-door patient in a metropolitan hospital for several months at a time, with only temporary relief. Uterus large, cervix greatly eroded, abundant discharge issuing from the cervix. Intra-uterine medication at once commenced. In two months she was able to take a place, but came occasionally to the hospital for treatment. This patient showed herself to me two years after she had been under my care, during which time she had been in perfect health.

CASE 3.—E. W——, aged twenty-eight. This case is of peculiar interest, inasmuch as she was sent to me in March, 1872, as a test case, on purpose to try the effects of intra-uterine medication, under the impression that her case was one which it was impossible to cure. She had been an out-patient at several hospitals and an indoor-patient in one for three months. Her case was certainly a severe test, as it was one of the worst I had ever had an opportunity of seeing. She is a single woman, but had a child some years ago, and has suffered ever since from severe abdominal pain, excessive leucorrhœal discharge, and menorrhagia. She is quite unfit for work, and her symptoms have been steadily increasing, in spite of treatment. The uterus was found to be greatly hypertrophied and tender on pressure; the cervix, large, boggy, and bleeding abundantly when touched, being covered with granular erosion. The os uteri was so patulous that it would readily admit the point of the finger, just as if it had been dilated with a sponge tent. Glairy mucus poured from it in abundance, and the penniform rugæ of the cervical canal were so hypertrophied that they could be felt in ridges, just like the leaves of a book. The uterus was acutely retroflexed. The patient was under my care in the hospital for several months, during which time she was subjected to intra-uterine medication once a week, and iodised cotton and glycerine also applied. She improved steadily, gained flesh and strength, and the discharge greatly diminished; and then she became an out-patient. When in the hospital no attention was paid to the retroflexion, but when she went out a Hodge's pessary was applied. She was now well enough to take service, but still comes to the hospital once a fortnight. The cervix is now perfectly healthy in appearance, and the uterus of normal size. No pain is felt, and she is quite able for work. She menstruates normally. There is still rather profuse cervical discharge, but the os is now so much less patent that the probes cannot be introduced with the same ease as before, although when she came under treatment it was perfectly possible to swab out the uterine cavity with a piece of cotton held in the speculum forceps.

It is needless to multiply cases. Those I have related are sufficiently striking examples of the possibility of effecting a cure even in cases of old standing, and the impossibility of doing it in the ordinary way, as they had each of them been subjected to the best treatment, intra-uterine medication alone excepted, that the most advanced science could afford.

I append a note of one more only, from my private practice, because it forcibly illustrates the view I have taken of the secondary importance of flexion in connexion with these affections.

CASE 4. — Mrs. W——, aged twenty-six, mother of three children, and has also had repeated miscarriages. Has been in India ever since her marriage. Suffered extremely from uterine symptoms, and was sent down from the provinces to be under the care of my friend, Dr. Charles, the Professor of Midwifery in Calcutta. After being there for some time she came home, bringing to me a note from Dr. Charles, stating that the uterus was in a state of subinvolution, measuring four inches and a half in length, and that it was acutely retroflexed. These conditions I verified on examination. There was also very abundant uterine catarrh, great derangement of the general health, and total inability to walk on account of the pain produced. This patient was also treated with intra-uterine applications of carbolic acid, and rapidly improved; all her symptoms diminished. She lately returned to India, in perfect health, and with a uterus of normal length. Once or twice I attempted to insert a Hodge's pessary, but she never could bear it. As she improved, however, the retroflexion, which was acute and marked, entirely disappeared, and without any special attention being paid to it. I mention the case because it seems to me conclusively to prove that the flexion had not, in this case, anything to do with the causation of the disease, and that it is sometimes, under favourable circumstances, perfectly possible to cure a retroflexion without any mechanical appliances.

In conclusion, let me repeat that, while intra-uterine medication is not a panacea for all the ills that female flesh is heir to, and while I strongly deprecate its injudicious use in unsuitable cases, we have in it a most valuable means of treatment, which will serve us in good stead in some of the most troublesome and obstinate cases that come under our care, and which has by no means received the fair trial amongst us that its importance merits.

ON HEREDITARY SUPRA-CONDYLOID PROCESS IN MAN.

BY JOHN STRUTHERS, M.D.,
PROFESSOR OF ANATOMY IN THE UNIVERSITY OF ABERDEEN.

I AM now able to furnish a case proving the supra-condyloid process to be hereditary. By the kindness of my esteemed pupil, Mr. Robert Milne, I was able to show to my class last winter a young man in both of whose arms the process is well developed, and the members of the class embraced the opportunity of examining the arms, and of satisfying themselves how easy it is to recognise the presence of the process in the living body. Having ascertained that the young man had relatives living in the country, I asked Mr. Milne to examine the arms carefully; and he has ascertained the following facts:—

The process is present in the left arm of the father, not so well developed as in the son above-mentioned, but distinctly felt; no trace to be felt in the right arm. There are five sons and two daughters, the daughters being third and fifth in the family. The eldest son has it very distinct in the left arm; no trace to be felt in the right. The second son has it slightly marked in the left arm; no trace in the right. The next three (the two daughters and the third son) have no trace of it perceptible in either arm. The fourth son (the one first mentioned as seen by my class) has it well developed on both sides, but most on the left. The youngest son (aged fifteen years) has it pretty well marked in the left arm; no trace felt in the right. This account of the presence of the process in this family may be relied on as regards its presence to an extent ascertainable in the living body; but from what we see in dissection, it may be present, but so short as not to admit of recognition through the soft parts. The specimens in my collection, however, show that though well developed on one side, it is not necessarily present on the other.

Here, then, we have this remarkable variety present in the father in one arm, and in four of seven children; in three of the four on one side only, and that the same side as in the father (the left); while in one (the fourth son and sixth child) it has gathered force, showing itself on both sides, and more developed on either side than in the parent, the left, however, still predominating. Although the circumstances under which this variety is usually met with by the anatomist are such as almost to preclude the possibility of proving its hereditariness, there was no reason to doubt that this, like other varieties, would be transmitted by inheritance. But it is satisfactory to have the history

of the supra-condyloid process completed by the establishment of this fact.

It would probably be found, if they were looked for, that similar cases of supra-condyloid process running in families are not very infrequent. When well, or moderately, developed, it is easily felt as a pointed projection about two inches above the internal condyle. The altered position of the median nerve and of the brachial artery (or, if double, of one of the divisions) may also be made out, though obscurely. Some of my former pupils in Edinburgh will recollect the case of the cabman whom I used to show in my lectures there, and how readily the process could be felt in both arms. I would feel obliged if any of the readers of THE LANCET who may recognise the process in a living person who has relatives within reach, will communicate with me. If anyone will take the trouble to examine the arms in any considerable hospital, or school, or regiment, he will probably find a case of it. I have met with it in various degrees of development in about one in fifty bodies, but one must not expect to be able to recognise it with certainty nearly so often in the living body.

This process would, I believe, be found to occur as a variety also among some of the higher animals in which it does not exist normally, were they examined as often and as carefully as the human body is. I noticed it on the humerus of a fossil bear in Cuvier's palæontological collection in the Jardin des Plantes, and I have the arm of a cat in which most of what should have been the bony arch is represented by ligament. Someone will probably come upon the variety in one or other of the anthropoid apes as they increase in our collections.

I do not enter here into anatomical details connected with this variety, having considered these fully in previous papers (*Edinburgh Medical Journal*, 1848; *British and Foreign Medico-Chirurgical Review*, 1854; THE LANCET, 1863); but the following illustrations may be interesting to those whose attention has not been directed to this structure.

Fig. 2

Fig. 1

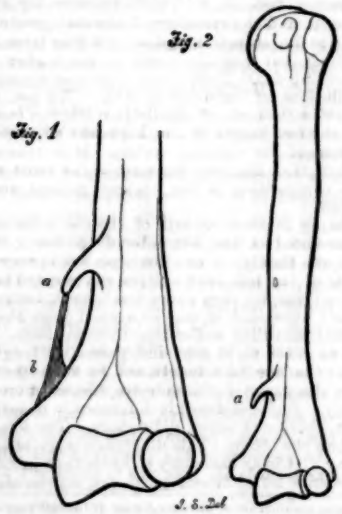

Fig. 1.—Process (*a*) and ligament (*b*) completing the arch in man. Half natural size. The nerve, artery, and venæ comites pass through.

Fig. 2.—One-fourth the natural size.

In my collection may be seen a large number of specimens illustrating the various conditions of the process in man, and its relation to the soft parts.

I am at present dissecting a case of cervical rib, and as this variety may be felt in the human body, I take the opportunity of saying that I would be glad if any of the readers of this paper will communicate with me if they know of a case in a person whose relatives are within reach. There is no reason why this variety should not be hereditary, and it would be interesting to have it proved. I have recognised the variety easily in the living body, and I recollect that Mr. Syme told me that he was familiar with the condition. It is liable to be mistaken for an exostosis of the first rib. It may be felt as a knob-like projection in the hollow above the clavicle; the pulsation of the subclavian artery, when it is raised by the rib, being more distinct than usual.

Fig. 3

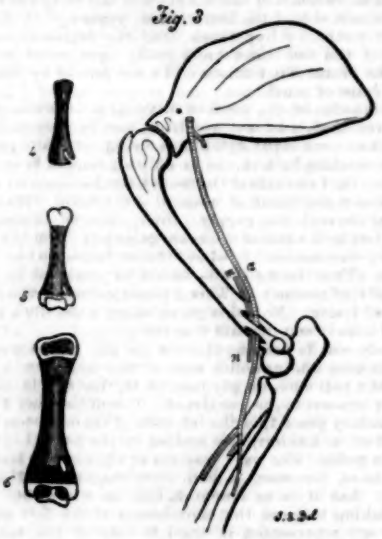

Fig. 3.—From fore-limb of cat. Half natural size. The median nerve (*m n*) and brachial artery (*a*) are seen to pass through the foramen.

Figs. 4, 5, and 6 show the development of the arch in the kitten: Figs. 4 and 5, at birth; Fig. 6, five weeks later. The half-grown bony arch in the kitten corresponds exactly to the full-length bony process in man.

ON THE ANATOMICAL & PHYSIOLOGICAL LOCALISATION OF MOVEMENTS IN THE BRAIN.*

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(*Continued from p. 164.*)

WE have now to consider the method of representation of movements on the largest scale. Just as there are from *destroying lesions* of different gravities in the region of the corpus striatum ranges of paralysis from weakness of the face, arm, and leg of *one* side to universal powerlessness, so from *discharging lesions* in this region there are all ranges of spreading of spasm from the most local to universal convulsion. Let us consider a severe convulsive paroxysm. The spasm begins, we will suppose, in the right hand, affects the *right* side (the face, arm, and leg), then *both* sides of the trunk, and next the face and limbs of the *left*

* My colleague, Dr. Gowers, has kindly drawn my attention to the following remarks by Sir Charles Bell:—"It is a fact familiar to pathologists that, where debility arises from affection of the brain, the influence is greatest on those muscles which are, in their natural condition, most under the command of the will. We may perceive this in the progressive stages of debility in the drunkard, when successively the muscles of the tongue, the eyes, the face, the limbs, become unmanageable; and, under the same circumstances, the muscles which have a double office—as those of the chest—lose their voluntary motions and retain their involuntary motions; the force of the arms is gone long before the action of breathing is affected." ("Nervous System," 3rd edit. p. 165.) — With regard to one point in the above, it is interesting to observe that in some cases of hemiplegia the two sides of the patient's chest move equally in quiet breathing, whilst in

side. What I wish to draw attention to prominently is, that from destroying or discharging lesions of but *one* side of the brain there results paralysis or convulsion of *both* sides of the body. This seems to me to warrant the inference that movements of the *two* sides of the body are represented in each side of the brain. Some years ago Dr. Broadbent put forth the hypothesis that the bilaterally-*acting* muscles of the two sides are equally represented in each side of the brain. That this is so I have proved by observations on cases of convulsion; and, as above stated, I believe that the muscles of the *limbs* of both sides—the muscles of those parts, that is to say, which can act independently of their fellows—are represented in each side of the brain.

I must consider both the *universal powerlessness* from a *destroying* lesion of one side of the brain, and the *universal spasm* from a *discharging* lesion of one side of the brain. (We shall, for verbal convenience, suppose, throughout these remarks, that the left is the side of the brain damaged.) I begin with *universal powerlessness*. I believe this to be really two-sided paralysis. (That the right side should be paralysed presents no difficulty, of course.) Universal powerlessness is the result of a grave* lesion. Now this grave lesion is usually a bulky clot, and thus it may be said that the palsy of the left side of the body results because the clot on the left side of the brain squeezes the opposite side of the brain; or again, that, as the patient is deeply insensible, the left side of the body only *appears* to be paralysed. I confess that I have no satisfactory proof that the left side of the body has been palsied from a hæmorrhage limited to the left side of the brain in a patient who was conscious at the time I examined him. I have, however, only to show that the left side is *weak*, not that it is as much palsied as the right. For whilst wishing to prove that movements of the left side of the body *are* represented in the left side of the brain, I wish also to prove that they are *less* represented therein than are the movements of the right side. It is only to be expected that the left side will suffer for a short time. There is an order of recovery in cases of hemiplegia, and I suppose in all other palsies; it is that the more automatic movements are regained first. Thus, in hemiplegia (right side, we suppose), the leg recovers before the arm, and if there be at the outset a further degree of paralysis—viz., lateral deviation of the eyes and head—these deviations are usually transitory. It is then only reasonable to suppose, when there is yet a further degree of paralysis—namely, of limbs of the left† side, that this will pass off first of all.

But there is proof that fibres pass from the left corpus striatum down into the left side of the cord, as well as into the right side; there are "direct" as well as "decussating" fibres. That there is a "decussating paralysis" from lesion of the left corpus striatum, no one doubts; but the existence of direct fibres, I think, supports the inference that there is also a transient "direct paralysis" from extensive lesion of that centre. After old lesions of the left corpus striatum there is Wallerian wasting of nerve-fibres, traceable from the seat of disease not only down into the *right* side of the cord, but also into the left. This splitting of the bundle of wasted fibres on entering the cord is, I think, demonstrative evidence that *both* sides of the body are represented in the *left* corpus striatum. Does it not show that movements of the *left* face, arm, and leg, are represented in the *left* corpus striatum by the *non-crossing* fibres, as well as that movements of the *right* face, arm, and leg, are therein represented by the *crossing* fibres? It may, however, be urged that these non-crossing fibres are solely for the bilaterally acting muscles ("muscles of the trunk"). But if now we consider the phenomena of a severe convulsion, and find that from a discharging lesion of the left side of the brain the left face, arm, and leg are convulsed (after the right side), it is, I think, most reasonable to conclude that the non-crossing fibres are for the movements of the muscles of the left face, arm, and leg, although perhaps chiefly for those of the left side of the trunk.

From these facts we may conclude that the movements of both sides of the body—those of the limbs as well as those of the trunk—are represented in each side of the brain. The inference is that the units of the nervous system are double units, as the whole nervous system itself is. In chemical metaphor, the unit of action is a molecule of two atoms. But it is not meant that the double unit is a mere duplicate. For, again referring to the *whole nervous system*, we see that *its* highest halves are not *mere* duplicates. Saying nothing of right-handedness, of the fact that disease of but *one** hemisphere can make a man speechless, and of the statement of Gratiolet that the left frontal and right sphenoidal and occipital convolutions are developed earlier than their fellows, there is the striking fact that the convolutions of the two hemispheres are not symmetrical. These differences in form imply differences in function; structure is statical function.† This is the more significant when we find that the asymmetry becomes greater the higher we go in the animal kingdom, not only from lower to higher animals, but from the lower to the higher races of men. According to Dr. Todd, there is greater asymmetry in the convolutions of intellectual men. We see, then, that the higher in the scale of intellectual life the less of a duplicate are the two halves of the highest and most important divisions of the nervous system. It is reasonable to suppose, then, that the two elements of the units which enter into the composition of the highest centres are not mere duplicates.

Whilst insisting that movements of the two sides of the body are represented in the left side of the brain, it has been pointed out that they are not equally represented; the movements of the left side are *less* represented in the left side of the brain, for they suffer less from a destroying lesion (and, as I have said, it may be argued that they do not suffer at all), and they suffer less in convulsion. The fit which begins in the right side, and passes at length to the left, affects that second side less, and for a shorter time, and, I believe, the parts of this side are affected more contemporaneously. But besides this difference in *quantity* of representation, there are other differences. The left side suffers *later* than the other. This difference is quite as important as any. It is as necessary to know that in certain centres movements of different parts are represented in

voluntary breathing there is less expansion on the paralysed side. As to another point, we have to account for the *increase* of power (the excitement) in the drunkard who has lost *voluntary* power. I believe it to be a fact of the same order as the increased excitability of a nerve after its division, and of the same order as the increased reflex excitability of the lower segment of the cord when cut off from the brain. (The last-mentioned fact has been used by Dr. Thompson Dickson to illustrate his views on epilepsy, the paroxysm of which, he believes, results from a loss of control.) I believe that the outrageous and violent conduct which occasionally occurs in an epileptic patient who *has lost consciousness* is a fact of the same order—that after *sudden* loss of voluntary power there is an increase of *automatic* action. In hysteria there is loss of voluntary power, and yet there is often excitement. The contradiction disappears if we can establish that the excitement is of lower and more automatic processes from lack of inhibition by the higher and more voluntary.

* The word *gravity* is used as inclusive of two factors, *quantity* of nerve-tissue destroyed and *suddenness* of destruction. Suddenness is a most important factor; hence a difference betwixt cerebral embolism and cerebral thrombosis; betwixt the symptoms of cerebral hæmorrhage and cerebral tumour; betwixt bleeding an animal to death slowly and suddenly (in the latter there are convulsions). It *seems* to make a difference even in the *kind* of symptoms, for as Prévost says of the lateral deviation I have so often mentioned in this paper, "C'est surtout dans les attaques *brusques* que s'observe cette déviation." Of a large clot we have to observe that it destroys, that it destroys suddenly, and that it squeezes widely and suddenly.

† Here it may be well to advert to a difficulty, a very superficial one, in the use of the words voluntary and automatic; one which would equally attend the use of the words special and general, independent and dependent. Perhaps the best words would be, varied and similar. Those movements of the left side of the body which are supposed to be represented in the same (the left) side of the brain (and from *sudden* lack of which there results transitory left-sided palsy) are called automatic. It seems contradictory to call movements of the *limbs* automatic. The speculation is that those movements of the left side which are represented in the left side of the brain are automatic, or subordinate to those of the right side of the body, which also are represented in that left side of the brain. Put otherwise, the muscles of the limbs of the left side are, in the right side of the brain, represented in movements from the voluntary to the automatic, and in movements from the automatic to the voluntary in the left side of the brain.

* The fact of most significance is, not that disease of the *left* hemisphere mostly makes a man speechless, but that disease of but *one* hemisphere can make him speechless. I have suggested that one hemisphere is for the automatic, and the other for the voluntary and automatic, use of words. It is well known that speechless patients may sing; on this point, and on the singing of imbecile children, I have remarked in the "Mirror" of this Journal, February 17th, 1866, and again in a subsequent "Mirror," where I quote Dr. Langdon Down. There is in this month's number of the *Edinburgh Medical Journal* a valuable paper by Dr. Ireland, in which he says that in mere taste for music idiots are not much behind other children. Music is probably one of the most *automatic* of higher mental operations; hence the significance of the existence of musical faculty in those who have little higher mental faculty. It is a fact of the same order as many stated in the text. Spencer (Psychology, vol. ii., p. 471) says (when speaking of inherited experiences) that faculties, as of music, which scarcely exist in some inferior human races, become *congenital* in superior ones.

† It is possible that the asymmetry may be such that whilst the third left frontal convolution is, so to say, the "yellow spot" of speech, some other convolution is the chief seat of word-processes on the right. I think this is probable because in one seizure dependent on disease of the third *right* frontal convolutions, the discharge was *first* on the muscles of the thumb, and not on the parts for the exteriorisation of speech.

different order as it is to note that they are represented in different degrees.

We have, then, two things to bear in mind—(1) that movements of the right and left limbs are represented in the left side of the brain; and (2) that the right are represented more than the left, and so represented that they are developed at a different time. Are there other differences? Other facts supplied by the Wallerian wasting, already spoken of, warrant us in seeking further differences. For descending wasting occupies different tracts of the cord. The fibres wasted in the right side of the cord (crossing fibres) are those of the posterior part of the lateral column, those in the left side (direct fibres) are in the anterior column near the middle line; (as before stated, the lesion is supposed to be of the left corpus striatum). These facts justify the inference that the two sides of the body are not represented in each half of the brain in the same way. To suppose otherwise would be to hold that the two different parts of the cord had the same function. We have already spoken of difference of quantity of representation (the left side being less represented). Will not the difference we are now in search of be one of *order* of representation?* We find that, speaking generally, the order of representation in the right side is from the voluntary to the automatic movements. Is the order on the left side from the automatic to the voluntary? It will be observed that it is not supposed that the two different strands of fibres in the cord represent different *muscles* on the two sides of the body; but that each strand represents the corresponding muscles of the two sides of the body, but made up into movements of different degrees and orders. Thus, to put it roughly, the speculation is, that on the right side the order is from the limbs to the trunk, on the left from the trunk to the limbs.

I have, I regret to say, no useful observations of the order of spreading of spasm on the *left* side. As I think it very important to make observations thereon, I will write down certain questions. 1. Does the spasm of the left side begin in the leg? 2. Does it go *down* or *up* these limbs? 3. Does it affect the extensors more than the flexors or *vice versâ*? 4. Is the spasm more tonic than on the other side? (The fit is supposed to begin in the right hand.)

Of course, since our object is to learn the plan of representation of movements, we must also study healthy movements, taking the simplest of these. I have several times spoken of "effort," using the word in its technical sense. In lifting objects of increasing heaviness with the right hand we bring into play movements spreading from the most voluntary to the most automatic. At a certain stage the left limbs are engaged; the left arm is lifted away from the side, the forearm is more or less extended, and the hand is open; the leg is held off the ground somewhat stiffly from the hip. I think it probable that the spreading of spasm to the left side will conform roughly to the spreading of movement in effort to the left side. We shall be assisted in investigating the order of representation of movements by considering the play of the limbs in walking. Thus, when the right leg comes forward, the right arm goes backwards and the left forwards. Probably, however, these movements have their representation in the cerebellum; but somewhere the order, as well as the degree, of these movements will be represented.

Both in hemiplegia and in convulsions beginning unilaterally we note certain associations—e. g., affection of the orbicularis palpebrarum along with affection of the limbs. Donders' researches give an explanation of this association. The most important, however, is the association of affection of *certain* movements of the eyes with affection of those of our limbs. Significantly (and in accordance with the principle spoken of throughout this paper) the movements of the eyeball which are first affected are the *lateral*. We can overcome a prism of from 20° to 30° with its base placed outwards, and one of 6° to 8° with its base placed inwards; but few persons can overcome more than a prism of 1° or 2° with its base turned upwards or downwards. There is then greater variety or independence in the lateral movements of the eye. (The internal rectus is the strongest of the ocular muscles.) In association with this greater independence of the lateral movements we may note that the sensibility of the retina diminishes less rapidly outwards than upwards and downwards. That the movements of our chief tactual organs should have close and direct associations in the *highest* nervous centres with certain movements of the eyes is what one would expect if, as Spencer says (Psychology, Part 24, p. 358), "tactual impressions are those into which all other impressions have to be translated before their meanings can be known." I suppose visual impressions and ocular movements may be said to "stand for" tactual impressions and movements in the sense that the strong excitation of the nervous processes of the former leads to *faint* excitation of those of the latter (movements of the hands, &c.). The study of cases of hemiplegia and convulsion shows us, not only that there is an association, but the *order* in which eye movements and limb movements are associated. Of course a coarse lesion of a nervous centre, or a sudden discharge of one, is not a very neat experiment. In hemiplegia the parts suffer in degree, I believe, in the following order: arm, leg, side of face and tongue, orbicularis palpebrarum, lateral movements of eyes, lateral movements of head. The difficulty obviously is that several systems are damaged all at a blow—the movements of lifting, by which we have ideas of weight, the eye to hand movements of writing, the movements of speech, &c.

I have observed cases of hemiplegia complicated with hemiopia. I have as yet had no autopsy on a case of this kind; but I think it important to draw attention to the association because I think it is a very significant one, especially as there has been a very persistent and a very unusual amount of loss of sensation in the hemiplegic region; and in one case under my care the power of estimating weights is very much affected. I believe the lesion to be in the thalamus opticus. It is very significant that a *lateral* loss of vision occurs with hemiplegia. In these cases the patient cannot *see* to the paralysed side; his condition is the sensory analogue of that of the hemiplegic patient who, having lateral deviation of the eyes, cannot *look* to the paralysed side. Since the sensori-motor processes which form the anatomical substrata of our ideas of objects are retinal impressions and ocular movements, the study of deviations of the eyes and corresponding limitations of the field of vision has an important bearing on mental physiology.

There are other conjugate deviations of the eyes besides lateral. Thus in lesions of the right middle peduncle of the cerebellum the right eye is turned upwards and outwards, the left downwards and inwards. Just as there is an association of lateral movements of the eyes with movements of our tactual organs for ideas of objects, so we may suppose that there will be associations of ocular movements of convergence and divergence (the former especially downwards, the latter especially upwards) with those movements of the spine, legs, and arms in locomotion, represented in the cerebellum, for ideas of distance; hence the importance of studying particular ocular deviations in association with accompanying disorder of movement. That the two sets of ocular movements are to a large extent separately represented seems clear from the researches of Adamük. He finds that the anterior tubercles of the corpora quadrigemina rule the side-to-side movements of the two eyes, whilst irritation of the posterior part of either the right or left eminence produces strong convergence, lowering of the visual lines, and contraction of the pupil. The cerebrum contains processes of eye and tactual movements for seeing objects; the cerebellum, we may suppose, contains processes of eye and locomotor movements for estimation of distance. I shall shortly try to show that facts of disease and experiment support this inference. The association of ocular deviations with circus movement, rotation, and rolling, is well known, and is obviously very significant with regard to what has just been said.

(To be continued.)

* Strictly this is the order of the *loss* of movements from breaking up of nervous processes. The representation of movements in the healthy organ will be in the reverse order. (See p. 84.)

TWENTY-SECOND CASE OF OVARIOTOMY IN ITALY.—The *Gazzetta Medica Italiana Provincie Venete* contains the relation of the twenty-second case of ovariotomy performed in Italy. The operation was performed by Dr. Marzolo, and terminated successfully. Microscopical examination of the tumour showed that it was a cystic fibro-sarcoma of the ovary.

ON THE SELECTION OF POSITIONS FOR CATHETERISM.

BY W. F. TEEVAN, B.A., F.R.C.S.,
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AT the present time the choice of a position for catheterism—whether it concern surgeon or patient—must be regarded as perfectly optional, and determined by no better reason than the tradition of each particular hospital. If an examination be made into the comparative merits of the various positions open for selection, it will be seen that what is apparently optional is not so in reality, for if one position offers advantages not possessed by any other, or if it be free from disadvantages attaching to each other situation, it is no longer a matter of choice, but one of unconditional acceptance of a demonstrated fact.

The position to be adopted when an instrument is required to be passed must be considered in its twofold aspect, as affecting patient and surgeon.

I think it may be said that in this country it is usual for the manipulator to stand by the side of the patient, whom he has placed in the recumbent posture; and it is not difficult to discover the reason of the custom, for, as metal instruments have usually been employed, it followed as a matter of course that the patient was forced into the recumbent position, as the only one in which he could have endured the pain and annoyance resulting from prolonged catheterism. The surgeon who is about to pass an instrument is similarly situated to a captain steering his vessel into harbour through a tortuous channel, and a very cursory view of the course pursued by the latter will show that there is much to be gained from noticing the position adopted by the captain. The first thing that strikes us is that the captain so places himself that his body, axis of vision, vessel, and the point to which he is steering, are all in the same median plane. Now he derives the greatest possible advantage from this method, and in fact places himself in the most favourable position for accuracy. The late Professor De Morgan stated in one of his lectures that there were but few men who could shut their eyes and then picture to themselves three separate and distinct lights, and that, as a rule, the majority of men could only imagine two points clearly apart; for if they tried to picture more the images became indistinct, confused, and quickly merged into one or two. Therefore the fewer the points we have to carry in our mind's eye, the easier will it be. In everyday life we see men instinctively carrying this out, and whether we observe the captain, engine-driver, or rider or driver, we see them one and all reducing the points to the fewest possible, and putting them all in the same median plane. The surgeon, however, who stands by his patient to guide a catheter into the bladder dislocates his points, if I may use the expression, and places himself in the most unfavourable position for success. I would therefore premise my observations by saying that whatever positions be selected they ought all to lie in the same median plane, and I feel sure that a very short trial of the comparative merits of both methods will convince the operator that it is much easier to steer a catheter into the bladder when all the points are in the same median plane than when he has dislocated one or more of them by placing himself at an angle to the path along which he has to guide his instrument. The position for the surgeon ought to be selected before that for the patient, inasmuch as the first is the active agent in the operation—he has to do something, often very difficult, and he ought to be permitted to choose that position in which he will be most likely to attain success. The surgeon is the active agent, the patient the passive; the former ought to have the greatest freedom of motion, the latter had better have none at all, the more fixed he becomes the better. Let there be the greatest amount of mobility in the instrument, but none at all at the gateway. Now, there are three positions open to the surgeon: he can stand, or sit, or kneel down. We may dismiss the last from discussion, as it can only be required in some very exceptional cases. The standing position, which is the one usually followed in this country, has four great disadvantages attached to it: it is the most fatiguing; it is the one in which the operator will find his delicacy of touch impaired if the manipulations be prolonged; it is the one in which the surgeon is most likely to lose his temper or become impatient; and, lastly, it is the most favourable position for making a false passage. I consider the last objection to be the most serious, for false passages, when met with, are nearly always to be found in the lower wall of the urethra, and they occur there because the surgeon, when standing, has enormous power, and as he bends over the patient he bears heavily on the instrument, and unwittingly forces it into the part of the canal I have mentioned. Now, the sitting position is absolutely free from all these objections. However prolonged the operation may be, the surgeon will not become fatigued, and, as a matter of course, he will not run the chance of losing his temper or his patience. But the sitting position has special advantages attached to it; it is the one in which he possesses the greatest freedom for imprinting any direction he may desire on his instrument, and, happily, it is the one in which he enjoys the maximum amount of mobility with the minimum of power, and is, therefore, the one position in which he is the least likely to make a false passage. Then, again, when the surgeon sits, and the patient stands, the urethra, instrument, and direction of force exercised by the operator may all be regarded as in the same horizontal plane, and so placed that he is enabled to carry in his mind's eye a central axis round which he can work, as from a centre, and so examine every point on the face of the stricture when searching for the entrance. If the surgeon adopts the sitting position, I feel convinced that he will in the long run prove a far more successful operator than one who stands, and that he will often succeed where the latter has failed.

Now for the patient's position.* He is, as I have mentioned, usually placed on his back, with his shoulders supported and knees drawn up. This position possesses but one advantage, and that is, the patient is less likely to faint than in any other. On the other hand, there is a very serious disadvantage attached both to it and the sitting posture, and that is that they are neither in the same horizontal or vertical plane as the instrument and direction of force, when the surgeon is seated. There is a special objection to the sitting posture for the patient, inasmuch as, if the bladder be distended or the prostate enlarged, there will be a great alteration effected in the relation of the neck of the bladder to the axis of the urethra; and I have often demonstrated on the living body that catheterism, when impossible in the sitting position, becomes perfectly easy if the patient be extended to his full length. I have, at p. 533, vol. i., of THE LANCET for 1871, stated that nearly all strictures are situated at the triangular ligament, and I have there explained the reason. Now I am not aware that there is any evidence to show that the urethral opening in the triangular ligament can be in any way altered by change of position; but it may certainly be said that it is far more difficult to introduce an instrument into a stricture if its mouth be flaccid and mobile. What we desire is fixity, and we shall best achieve this object by placing the patient upright against the wall and stretching his penis horizontally forwards. So situated, we have at last attained all that can be desired; for the urethra, instrument, and direction of force are all in the same horizontal and vertical plane, and our axis of vision will nearly correspond. Thus, therefore, we shall be able to impress on the point of the catheter, when lost to view, any direction we may desire it to seek, and our operation will no longer be an exhibition of blind and unguided force, but a successful demonstration of applied skill.

Portman-square.

* I would here recall M. Auguste Mercier's warning: "J'ai appelé l'attention des médecins sur le danger qu'il y a d'évacuer trop rapidement le contenu de la vessie quand elle est fortement distendue."—Recherches de 1844.

THE St. Andrews Medical Graduates' Association held an extra general session on the 8th inst., in the Freemasons' Tavern. Dr. Lockhart Robertson presided, and Dr. Lyon Playfair, M.P., delivered an address (commented on in another column) on "Universities in relation to Professional Education." The company, which included Drs. Sieveking, Bucknill, and George Harley, dined together in the evening.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

CASE OF INSULAR SCLEROSIS OF BRAIN AND SPINAL CORD.

(Under the care of Dr. MOXON.)

A CHARACTERISTIC case of this newly identified disease—the first, we believe, that has been recognised and verified in this country—terminated in the week before last in the above-named hospital. The following short history of it will show a close correspondence of the general symptoms with those observed in the several cases recorded by Charcot, Ordenstein, Bourneville and Guerard, Vulpian, Bärwinkel, Jouffroy, Leube, Schule, and others. The case will be more fully reported shortly; but, meanwhile, the following abstract will be of interest.

A woman, aged twenty-eight, was admitted in September, 1872, suffering from symptoms of an obscure chronic spinal affection. The history she gave was as follows:—Two years and a half before, she had had some kind of febrile attack, with diarrhœa, which laid her up several weeks. In recovering from this she found her left arm and leg weak and unsteady. The weakness spread in a few months and increased so that it involved all her limbs as well as her head and trunk, and gradually took away her power of walking and standing; until she was at last totally bedridden for the few weeks before her admission. In the meantime she had had little or no pain; indeed, the great and increasing weakness was all she herself complained of. Etiologically it is important to mention another statement the poor creature made when giving a more confidential account to the nurse—viz., that the cause of her disease was the having caught her husband in bed with another woman. It was not possible to learn how far this was right; but she was neglected by her friends. Her answers, however, on other subjects within our knowledge were generally trustworthy.

On admission her condition corresponded so closely with described cases of *Inselförmige sclerose* that Dr. Moxon concluded that it must be of that nature. Shortly, the symptoms were these:—Some muscular weakness of the hands, especially the left, but a much more striking jerky trembling of them when in action; the head and limbs were quiet when at rest, but any attempt to use them induced a jerking tremulousness, whose irregularity of direction distinguished it at once from paralysis agitans. It was more like chorea, but the discursion of the oscillations was less in proportion to their number—i. e., in chorea there are fewer and longer movements. Many little movements in all directions disturbed every voluntary act of limbs, head, lips, or tongue, so that she could not feed herself for fear of her fork, nor drink because the fluid was spilt on the way to her mouth. If she raised her head to sit up, it jerked about in a pitiful, helpless manner; when sitting she stooped, jerking unsteadily, and with the head projected forwards. This jerking palsy was marked also in all movements of the legs; she could not stand. Her speech was very peculiar, and characteristic of the disease. It was uttered *staccato*, every syllable followed by a pause, while the lips and tongue showed the same jerky unsteadiness as characterised all the voluntary movements. The sensibilities of the skin to touch, heat, and cold, as well as the muscular sense, were natural, or so far so that they appeared natural to ordinary methods of investigation, though she said sometimes they felt numb. The organic functions were generally healthy, but she was costive. In November there was incontinence of urine, and in December her motions came away involuntarily, while a rapid depravation of her general state hurried her downwards in spite of galvanism, nitrate of silver, tonics, and careful nourishment. The mental state was throughout characteristic. There was a singular instability of emotional equilibrium, so that laughing and crying were far too ready. Her intellect was narrowed, without unclearness, so that on the daily course of things before her eyes she replied tolerably well, but could not go much beyond this. There was no delusion, and her conduct and demeanour were always as right as the above-mentioned disabilities allowed.

In short, the symptoms were:—*Weakened intellect with staccato speech; jerky palsy of voluntary action in limbs, head, and trunk; retained sensibilities of skin and muscles; freedom from the pains of locomotor ataxy.* These symptoms mark off *insular sclerosis* as a distinct kind, which is quite as true and as recognisable as general paralysis of the insane, or as locomotor ataxy.

The post-mortem examination showed, as was anticipated, the following interesting alterations:—The brain was remarkably shrunken and hard; its convolutions sharply raised and narrow, separated by wide and deep sulci. Section through the hemispheres at the level of corpus callosum showed a great number of insulated grey patches, having quite the appearance of grey cerebral matter. (Such a case has been incorrectly described as heterotopia cerebri.) The patches were of various sizes, from that of a hemp-seed to that of a small nut. The smaller were always spherical, dark-grey, and less hard; the larger were irregular in outline, paler, of a peculiar surface minutely stippled with bright-white, and hard enough to resist section a good deal. The whole brain was so hard that a very strong stream of water did not break the surface of its section. The outlines of the affected parts were very sharply defined in every instance. There were about forty such patches in the white matter of each hemisphere. The grey matter of the surface was scarcely at all affected. The patches often came close up to it, but spared it respectfully, or, at most, advanced only a little way into it, never penetrating the darker outer layer of the grey matter, so that none of the patches were visible on the surface. Several patches were in the corpus striatum and in the thalamus. The aqueduct of Sylvius was encased in a layer of the grey change, of a quarter of an inch in thickness. This was the largest mass of grey change anywhere present, and it extended from the iter into the upper half of the right side of the pons, which part it entirely converted; then it reached some way into the medulla oblongata. This was almost the only instance of the disease that would suggest an extension along the course of the fibres. In the other patches there was a remarkable prevalence of circular outlines, advancing in curves like the outline of a cutaneous eruption. Indeed, the look of the disease proved its eruptive nature. The microscope showed a destruction of the medullary fibres within the diseased area, and a production of a felt of fine connective fibrils, with numerous granular and amyloid corpuscles. In these particulars the disease corresponds with the cases already recorded by French and German authors.

UNIVERSITY COLLEGE HOSPITAL.

STRANGULATED CONGENITAL INGUINAL HERNIA PROTRUDING FROM THE CANAL THROUGH THE RUPTURED EXTERNAL OBLIQUE APONEUROSIS; OPERATION; RECOVERY.

(Under the care of Mr. BERKELEY HILL.)

For the notes of this unusual case we are indebted to Mr. Colgate, house-surgeon.

The patient, a lad aged nineteen, was admitted on October 2nd, 1872, with a very rare form of inguinal hernia. The patient had suffered from congenital hernia up to the age of three years. His father was not ruptured, but his grandfather was. For some time before admission the patient had suffered from a slight cough, and for some days previous his bowels had been confined. He took a pill at bedtime on October 1st, and a draught in the morning of the 2nd. About 11 A.M. on the 2nd he was very much purged, and experienced great pain at the umbilicus. He discontinued his work, and took a little brandy to relieve the pain, but was immediately sick, and as the sickness continued, he went to bed. About 2 P.M. he first noticed by accident a swelling in the groin, but he did not know when or how it came. Violent dragging pain about the navel, doubling the patient up, set in, and vomiting occurred two or three times. Attempts at reduction failing, the lad was

sent to the hospital about three hours after the swelling was first observed. His condition then was as follows:—Vomiting had ceased; the tumour could be freely handled, though that increased the dragging pain at the umbilicus; there was no sign of collapse or anxiety.

The tumour consisted of two parts; one, occupying the scrotum, was translucent, soft and fluctuating, and overlay a small testis, which could be clearly distinguished at the bottom of the scrotum. A little below the external abdominal ring a slight horizontal sulcus partly separated this from the upper part of the tumour. This lay in the groin above Poupart's ligament, had the size and shape of a swan's egg, was extremely movable, soft, and could be pushed almost over Poupart's ligament, or towards the umbilicus, but not to any great extent, if at all, towards the scrotum. It was dull on percussion, gave no gurgling, but a faint crackling, like that of emphysematous cellular tissue, was perceptible, and some effusion had spread under the skin of the pubes and along the sheath of the penis. There was no impulse on coughing. On the inner side the external abdominal ring could easily be made out distinct from the tumour, with the cord issuing through it. Careful examination at the outer end of the tumour also discovered a deep continuation of it at the position of the inner ring; this part was immovable, and none of the tumour could be returned to the belly. The symptoms not being urgent, the house-surgeon elevated the pelvis, applied ice to the swelling for two hours, and then employed the taxis under chloroform, but without diminishing the tumour. At 7 P.M., or about five hours after the occurrence of the accident, when Mr. Berkeley Hill was sent for, the patient was in much the same state as on admission. No more vomiting, and no further action of the bowels. Pain was limited to dragging at the navel, no particular tenderness being experienced when the tumour itself was handled.

Notwithstanding the small amount of irritation then present, it was determined, should the taxis under chloroform again fail, to cut down upon the swelling without further delay for the following reasons. The sudden development of the tumour, its long, uncontrollable neck, and the large size of the protruded mass, rendered it unlikely that it could ever be replaced in its uncertain position, through the deep internal ring, without operation; hence delay could only be injurious. Chloroform was given a second time, but attempts to reduce its swelling only drove some of the fluid in the tumour down to the scrotum. An incision over the neck of the mass, opposite the internal ring, through the skin, and a little dissection of thin layers of cellular tissue, disclosed a very transparent serous layer, through which the gut was plainly descried. Search was made for the constricting band, which, after the margin of a tough aponeurosis (the external oblique) had been divided, was found at the internal ring. The sac, which was very thin, was ruptured during the search, and the gut was exposed freely, showing for about four inches a dull, crimson hue. While the intestine was being returned to the belly, fluid escaped from the serous sheath of the cord, and the scrotal tumour disappeared. The testicle also suddenly slipped up into view for a moment. By this time the unusual appearances of the tumour were to a great extent explained, and the anatomical variety of the hernia made clear to be a congenital one. The serum that escaped from the gut drained down to the bottom of the pervious tunica vaginalis through the external ring to the testis. But it was doubtful if the viscus itself had ever passed the external ring, though it is possible that it had been returned within the ring towards the belly during the efforts of the taxis. At the time of the operation the external oblique fascia had partly stretched, partly given way at an unusually weak point external to the ring—an occurrence already described to take place sometimes, though rarely; and the hernia lay in the loose cellular tissue under the skin. The congenital form of the rupture explains also the ease with which a large portion of the intestine slipped at once through the internal ring, as that was patent for its escape. But the rare peculiarity was the escape of the viscus out of the inguinal canal without passing the external ring.

The operation was performed in an atmosphere of carbolised water spray, and the wound was stitched up with carbolised silk and well padded and bandaged with carbolised gauze. A full dose of opium was given, and no food beyond iced water ordered till morning. At 9 A.M. next day the patient had slept well, felt absolutely no pain, and enjoyed a breakfast of bread-and-milk. During the next twenty-four hours flatus passed, and he remained still free from pain. Temperature 99·4°.

On Oct. 7th the wound was almost healed. The patient's progress was in every respect satisfactory. Flatus had escaped per anum several times, but no action of the bowels had taken place. He was ordered solid food in small quantities.

Oct. 12th.—Had a copious motion, and feels quite comfortable.

16th.—Wound being quite superficial, the antiseptics were left off and the wound dressed with a lotion of sulphate of zinc.

21st.—Sat up.

22nd.—Wound completely healed. Up all day.

26th.—Left the hospital fitted with a truss.

ST. MARY'S HOSPITAL, MANCHESTER.

ELEVEN CASES OF OVARIOTOMY.

(Under the care of Dr. D. LLOYD ROBERTS.)

THIS week we continue, from p. 168, the notes of Dr. Roberts's cases of ovariotomy. The number shall be completed as early as possible.

CASE 5. *Multilocular ovarian tumour, weighing 28¼ lb.; visceral and parietal adhesions; ovariotomy; recovery.*—Harriet W——, aged thirty-eight, from Salford, was admitted 26th April, 1872. Menstruation commenced at eighteen, and continued regular up till November, 1871, when it ceased. The abdominal enlargement commenced January, 1871. A large fluctuating tumour occupied the whole abdominal cavity. To the left of the umbilicus there was a solid mass. The circumference of abdomen was 43 in. Uterus movable; lower in pelvis than normal, and unconnected with the tumour; sound passed three inches. Complained of considerable pain in right hypogastrium; tongue furred; pulse 90; much emaciated. She had never been tapped.

May 8th, 1872.—Abdominal section performed, her former medical attendant, Mr. Fletcher, being present. Considerable parietal adhesions had to be separated, and several bleeding vessels secured (the ligatures being cut close). A large cyst was then tapped, through which the contents of a second cyst were evacuated. The incision had now to be enlarged, which revealed the presence of further adhesions in the left flank. On these being separated the tumour could be drawn out of the abdomen. A further adhesion (of about 2 in. long by 1½ in. broad) to the ilium was now encountered. Notwithstanding considerable care in dissection, the peritoneal coat of the bowel was separated. Three small arteries on the denuded intestinal surface bled freely; they were secured by silk ligatures. In separating the adhesions one of the cyst-walls gave way, its contents escaping into the abdomen; these, with considerable bloody coagula, were carefully sponged out. The tumour, formed by the left ovary, was then clamped and removed, the abdominal wound being brought together by fourteen sutures and dressed as before. The day after the operation she was troubled with flatulence; relieved at once by charcoal. Vomited once, and again on the second day, never afterwards. Backache was relieved by morphia suppository. She took ice, milk, lime-water, brandy, and beef-tea on the second day. Five sutures were removed four days after the operation, seven on the fifth, and the remaining two on the sixth day. Seven days after operation the clamp was removed; next day the bowels were relieved by an injection. From this date convalescence progressed uninterruptedly.

The tumour was multilocular, and weighed 28¼ lb. The cysts contained a viscid chocolate-coloured fluid.

CASE 6. *Unilocular ovarian tumour weighing 17¾ lb.; extensive and firm visceral and parietal adhesions; ovariotomy; recovery.*—Jane S——, aged twenty-eight, sent by Dr. Telford, of Bury, was admitted May 7th, 1872. Menstruation commenced at eighteen, and continued regular till her marriage at twenty-one. Has borne one child. Abdomen began to enlarge on left side, she thought, in 1868. A globular immovable tumour occupied the anterior and left parts of the abdomen; fluctuation distinct and free; per-

cussion dull over its whole surface; girth at umbilicus thirty-six inches. Uterus movable, slightly prolapsed and retroverted; measured three inches; cervix elongated; os patulous. Tongue clean; appetite good; bowels regular.

June 14th, 1872.—The abdomen was opened and the cyst exposed. Firm adhesions had to be slowly separated with the scalpel, and bleeding vessels ligatured. On the separation of the anterior adhesions, the cyst was punctured with a large trocar, and a large quantity of a dirty, purulent-looking fluid evacuated. Traction was now made upon the collapsed cyst, but the adhesions were so numerous that it could not be drawn out of the abdominal cavity. It was attached anteriorly and superiorly to the omentum and also to the umbilicus—in the right iliac fossa to the colon and appendix vermiformis; posteriorly to three considerable patches of the small intestine; posteriorly and superiorly to the diaphragm; anteriorly and inferiorly for about an inch square to the bladder. After dissecting off these adhesions, the cyst was drawn out, clamped, and separated. Considerable hæmorrhage took place, and the patient was so exhausted that she appeared to be sinking. The abdominal aorta was firmly compressed, and brandy administered. In a few minutes she had somewhat rallied. Fifteen to twenty ligatures were applied to the bleeding points, and cut short. When all hæmorrhage had ceased, the abdominal wound was secured in the usual manner. The operation occupied an hour and a half. When placed in bed her pulse was 140. At 5 P.M. no change in the pulse. She had had two hours' sleep, felt warm and comfortable and free from pain; took some iced milk and brandy and iced milk and lime-water; no vomiting.

15th.—Had slept four hours; no sickness. At 9 A.M. temperature 101° F. Diet the same as before. Complained of flatulence, which was relieved by teaspoonful-doses of charcoal. Urine free; contains abundant lithates.

16th.—Pulse 140; has slept two or three hours during the night; takes iced milk and brandy freely.

17th.—Pulse 135; wound dressed; four ligatures removed. Complains of flatulence; takes the milk, ice, and brandy freely; no pain or vomiting.

18th.—Pulse 130; four ligatures removed. Diet of milk and arrowroot. Wound healed.

19th.—Pulse 120. She is better to-day than she has been since the operation. Clamp tightened. Has taken milk and bread. No nausea or vomiting.

20th.—At 5 A.M. complained of pain in the abdomen. The nurse examined the wound, and found that a discharge of clear fluid was taking place from the lower part of the wound by the side of the clamp very like ascitic fluid. When examined, it was found to be highly albuminous. Clamp cut away. Was ordered fish for dinner. Pulse 110. From this date she continued to improve, the fluid continuing to ooze away until the wound had almost entirely healed. She continued to get stronger, and was discharged on the 27th of July, the fluid still oozing through a minute opening at the lower part of the wound.

Jan. 11th, 1873.—The oozing still goes on guttatim through a very minute opening, the size of a pin's point. Otherwise she has got stout, and eats well. She has menstruated regularly since the operation. The cyst contained a thickish fluid, very similar to pus in appearance and consistency.

Reviews and Notices of Books.

The Diseases of the Stomach. Being the Third Edition of the "Diagnosis and Treatment of the varieties of Dyspepsia." By WILSON FOX, M.D., F.R.C.P., F.R.S. London: Macmillan and Co. 1872.

THE present edition differs from the preceding ones chiefly in the addition of articles on ulcers and cancer of the stomach. As these subjects have been very fully and carefully considered, we shall confine our remarks to the chapters devoted to them.

The author distinguishes two forms of gastric ulcer. "The first of these, which is believed to be that in which the ulcer is found soon after its origin, presents a sharply defined loss of substance, of variable depth, in the coats of the stomach." "When the ulcer has existed for a longer period, its walls and floor undergo an inflammatory thickening, through which its funnel-like shape becomes more distinct." To explain the method in which gastric ulcers are formed he adopts the opinion of Virchow, that "the primary condition for their formation was an arrest of the circulation through a sufficient depth and area to permit the solvent action of the acid gastric juice to be exerted on the tissues deprived of the protective action of the alkaline blood." On such an important matter we should have been glad of some observations or experiments by the author; for, without denying that gastric ulcer may be produced in this way, there seems to us to be a want of sufficient evidence on the point. On one occasion we had an opportunity of studying the effects of gastritis in a dog, and of observing all the stages of gastric ulcer. At one part were extravasations of blood, at another portions of the blood-stained membrane were only connected by a few shreds, whilst in other places were round, sharply-cut ulcers. But in no case could we discover, by the most careful microscopical examination, any of the appearances ordinarily presented by the action of the gastric juice upon mucous membrane. Again, we surely might expect to find some evidence of the effect of solution by the gastric juice in cases where perforation of the stomach has taken place. Yet Dr. Fox correctly describes the peritoneal coat as giving way "after the previous formation of an ashy-grey slough." "The edges are never," he adds, "so ragged and thinned, nor do they present the same pulpy and transparent appearance, as is seen in the case of perforation by post-mortem solution."

The author quotes the opinion of Virchow, but gives us no observations of his own upon another important matter—namely, as regards the condition of the bloodvessels in gastric ulcers. According to our own observations the arteries or veins almost always present evidences of disease in long-standing cases. We are inclined to attribute to this circumstance much of the difficulty experienced in the recovery of persons affected with this disease.

The rules for the treatment of gastric ulcers are very judicious, and are clearly and distinctly laid down under the following heads:—"(1) Rest. (2) The cure of conditions of the stomach which cause undue acidity from fermentation or hypersecretion. (3) The relief of pain. (4) The relief of vomiting. (5) The arrest of hæmorrhage. (6) The relief of constipation. (7) The treatment of perforation." Like almost all authors who treat upon this subject, Dr. Fox, however, passes over the benefit often derived from a change of climate. In no disease are freedom from the cares of business and a change from the crowded town to the more invigorating air of the country more beneficial than in chronic gastric ulcer.

The symptoms of cancer of the stomach are described with great care. The author, we are glad to see, draws attention to a class of cases too often overlooked. He says:—"A third class of gradual and progressive emaciation, without distinct causes of marasmus, occurring at middle life, though unattended by any distinct stomach symptoms, should also engage attention. The manner in which cancer of the stomach can thus profoundly impair the nutritive processes, though completely unexplained, has, nevertheless, been distinctly recognised." We think if the author will examine with the microscope the glandular structure of the stomach in cases of simple ulcer and of cancer, he will find an explanation of the greater "impairment of the nutritive processes" in the latter. In simple ulcer, as he correctly states, the mucous membrane in the remainder of the stomach is "in many cases perfectly healthy," and, as a general rule, no grave alterations can be found in it. In cancer, on the contrary, it is rare to

find the tubular structure in a normal condition; the glands are usually compressed by fibrous structures, and are more or less in a state of complete atrophy.

We have directed attention to some points which we think require further careful investigation, but we should do the author injustice if we did not acknowledge the great care and ability with which he has performed his task. He has accomplished his design "of making the treatise as complete as possible, in relation to the numerous researches on the subject down to the present time." We believe that few, whether students or practitioners, will rise from the perusal of the work without feeling, as we do ourselves, that the study of it has been attended with pleasure and advantage.

Die allgemeine chirurgische Pathologie und Therapie, in funfzig Vorlesungen. [*General Surgical Pathology and Principles of Treatment, in fifty lectures.*] By Dr. THEODOR BILLROTH, Professor of Surgery in Vienna. Sixth Edition. pp. 776. 168 Woodcuts. London: Williams and Norgate. 1872.

WE reviewed the American translation of the fourth edition of this book less than two years ago. Perhaps it will give our readers the best idea of the present work if we analyse one section; and, for this purpose, we will select that which discusses the subject of wounds of the soft parts. This is divided into nine lectures. Dr. Billroth first treats of the various forms of incised wounds, of the different kinds of hæmorrhage, and of the mode of controlling it. He approves of torsion, but has not ventured to use it on the femoral. He has tried also Brun's "ligature pins," and was well pleased with the result in a case of amputation of the thigh. All the other methods of stopping bleeding, both by styptics and internal remedies, including the special cases of bleeding from the nose, pharynx, and rectum, are fully given. The next chapter is devoted to the different modes of applying the edges of the wound to one another, as by plastic sutures. He recommends sutures made of gold and platinum, which can be made of wonderful fineness, flexibility, and strength, but expresses himself as being perfectly satisfied in general with fine silk. The subject of inflammation is next discussed, and an excellent description is given of the microscopical changes that occur in the vessels, in the tissue itself, and in the nerves of the wounded part. He speaks very cautiously in regard to trophic nerves, respecting the existence of which he has evidently not made up his mind. None of the hypotheses at present advanced, he says, will explain satisfactorily the increased flow of blood that takes place to an inflamed part; although he seems to regard it as an inhibitory phenomenon, similar to that of the relaxation of the tone of the intestinal walls on irritation of the splanchnics. In regard to the union of the cut edges of wounds, he alludes to Schmidt's researches on the production of a coagulum by the junction of the fibrinogenous and fibrinoplastic substances, and points out how, after a few hours, there is an accumulation of white corpuscles around them, the origin of the former, on the views of Cohnheim, Waller, and Recklinghausen, being very interestingly given. His hearers, he says, can scarcely imagine how these doctrines have revolutionised the old opinions and accounts respecting inflammation, though they now form the basis of a future and more perfect conception of the whole process. These cells gradually become fusiform, and converted into connective or cicatricial tissue. The circumstances preventing union are then referred to. The next chapter is devoted to the consideration of Suppuration, the text being supplemented by many somewhat rough and diagrammatic but highly suggestive woodcuts. The eighth chapter deals with the subject of Traumatic Fever, and he shows how it is impossible to hold that this condition, or at least its most prominent symptom, increased temperature, consequent on augmented tissue-change, can be established through the nervous system, since it has been demonstrated by the experiments of Breuer and Chrobak that it can occur even after all the nerves of the part have been divided. The cause, therefore, of the febrile symptoms would appear to be the formation of some substance at the wounded part which is conveyed through the blood, and this view is supported by the fact that the same symptom may be excited by the injection of various substances, as sulphuretted hydrogen, sulphuret of ammonium, &c. The last chapter of this section treats of healing by secondary intention and granulation, the mode of union of arteries and veins, including thrombus. Our readers will see from this sketch that Professor Billroth's work is worthy of careful study, and is a good exposition of the scientific doctrines on which modern surgery rests.

We would, in conclusion, suggest to the Council of the New Sydenham Society that it is just one of the works that it is their peculiar province to introduce to the English practitioner. Excellent as are the later works that they have published, we doubt whether they would not better consult the pecuniary interests of the Society by issuing works like that before us, which contains a concise view of the progress of modern research on a practical subject, written by a man of acknowledged ability.

OUR LIBRARY TABLE.

The British and Foreign Medico-Chirurgical Review for this quarter leads off with what may be termed its political article on the Public Health Act of 1872, in which it is declared that "the opportunity of forming a good sanitary organisation is lost for the present. A safe foundation for it might have been laid in 1872. It will now be the work of other men and other times." The next article reviews the different works that have of late appeared on the Surgery of the Jaws. That on the Pathology of Gout is good. We confess that we have long had our misgiv'ngs as to the uric-acid theory of gout being an adequate one to account for all the phenomena of that disease. Lithia water appears to exert no beneficial effect, alkalies are disappointing, and colchicum, notwithstanding all that its enemies say of that drug, affords the best curative results. An article entitled "Some recent Researches into the Histology of the Nervous Centres," treats of the recent additions to our knowledge of the minute structure of the nerve-centres, in which the work of German histologists, as usual, occupies a prominent place. A long and discriminating notice of Dr. Thomas's excellent work on Diseases of Women follows, and fully bears out the judgment we have already pronounced in regard to it. The paper on the pretty well known case of Louise Lateau is interesting. The Lateau family take no money for the performances of their daughter; still money is solicited for the building of a little new church at Bois d'Haine. If the times have changed, there are spirits besides that of divination, and other methods than that of soothsaying which bring much gain. Among the original papers is one by Dr. Alexander Ogston, of Aberdeen, Observations on Small-pox, which, like all his productions, is very carefully worked out.

Operative Surgery adapted to the Living and Dead Subject. By C. F. MAUNDER, Surgeon to the London Hospital, formerly Demonstrator of Anatomy in Guy's Hospital.—This second edition of Mr. Maunder's manual has been improved by various additions and by the substitution of English woodcuts for many of the French ones formerly employed. Many of them are, however, damaged in appearance by being put the wrong way in the page. The directions given are satisfactory and correct, and evince considerable experience on the part of the author, who has succeeded as

well as is possible in combining instructions fitted for operations on both the living body and the dead subject.

Elements of Zoology. By ANDREW WILSON, Lecturer on Zoology, Edinburgh. Edinburgh: Adam and Charles Black. 1873.—The shortness of life is a blessing in one respect, inasmuch as it serves as an excuse for not knowing something of everything, which otherwise would hardly avail in view of the number of text-books prepared expressly for imparting the maximum of information with the minimum of trouble to the student. The work before us is one of this class. To write a book of this kind is a much harder task than is generally imagined. This volume gives a readable if inadequate account of the animal kingdom. We can only give it modified praise, for in many respects the information is not abreast of the day.

Hints for Obstetric Clerks, with Aids for Diagnosis, &c. By ALBERT F. FIELD, Resident Midwifery Assistant to St. Bartholomew's Hospital. London: Churchill. 1872.—We may dismiss this little volume in a very few words. It appears to us a very useful book, and creditable to its author's industry and discrimination. It contains a large amount of condensed and pertinent information, which is well arranged. The author expresses his thanks to Dr. Greenhalgh for revising the proof-sheets.

THE ROYAL COLLEGE OF SURGEONS.

PROFESSOR WILSON'S LECTURES.—Nos. II. & III.

THESE two lectures were devoted to an historical and descriptive account of leprosy: its varieties, its cause, pathology, and diagnosis; and a number of models and drawings were used in illustration of the various points brought under notice. Mr. Wilson adopted the usual division of the disease into elephantiasis tuberculosa, and E. anæsthetica, and spoke of it as having first an erythematous, then a tubercular, and, last, an ulcerative and a degenerative stage, being in these respects analogous in its course and features as regards changes in the skin to syphilis; and whereas, in the tubercular form, the disease spends itself on the skin chiefly, in the anæsthetic form the nervous system is peculiarly implicated, and nodosities are found upon the trunks of the superficially placed nerves. The meaning of the terms leontiasis, indicating the lion-like aspect of the face, of satyriasis, and the like, was briefly explained, as also that of elephantiasis mutilans—a term applied to leprosy when enucleation of the bones occurs. After speaking in detail of the disordered sensations, the alterations of pigmentation, the change of disposition to one taciturn and moody, in lepers, Mr. Wilson proceeded in his third lecture to discuss the cause. This he affirmed to be a special poison engendered by climatic influences. A predisposition to the disease was engendered by debility, from whatever cause this might arise; the debility favouring the operation of causes which, under other conditions, might not cause the disease. The Professor expressed the opinion that, in its endemic haunts, a special poison may be exhaled from the leper which might convey infection to others, and he thought that the disease might possibly be given to a child from a nurse through the lung exhalations, or through the breast-milk. He thought that, in the case of physicians long resident in leper asylums who became attacked by the disease, the occurrence of the latter was to be attributed to their constantly breathing the air infected by exhalations given off by the leprous. Danielssen and Boeck had stated that the disease was not contagious, and this was probably the case in the northern districts, where they made their researches; but the case was different in other localities. It is more contagious, the Professor thought, in some parts of India than others—viz., along the Malabar coast, at the Mauritius, and at Madagascar. A case was related in which the disease appeared to be taken together with syphilis. Whilst, however, the disease was contagious, it spread in the majority of cases by hereditary transmission. Mr. Wilson then referred at length to the history of leprosy in Surinam, as given in the work of Dr. Drognat Landré, and also to Dr. Hillebrand's account of the spread of leprosy in Honolulu, where the disease was supposed to be introduced by the Chinese, in illustration of the contagiousness of leprosy. In these two places it is asserted that leprosy has spread by contagion. Mr. Wilson guarded himself by saying finally that the disease was not contagious in the absence of favouring conditions of climate.

The pathological manifestations in the disease were stated to consist in the development of a cachexia associated with a colloid metamorphosis infiltrating the tissues and leading to their ultimate destruction. The colloid material is made up of minute cells having in some cases the characters of colloid spherules. The infiltration of the skin by this material leads to obliteration of the papillary layer, the formation of tubercular masses in the skin destroying the corium and connected structures, including vessels and nerves. The neurilemma of the nerves in various parts is infiltrated with the new material, which envelopes the nerves, separating at first the tubules, and leading presently to their atrophy. Besides these changes, anæmia, local congestions, pigmentations in the skin, mutilations, and the like exist. Mr. Wilson here exhibited a series of most admirable drawings from life, made by Dr. Vandyke Carter, showing the appearances presented by the eruptive manifestations, especially "the baras" of anæsthetic leprosy, the deformity of the hand in anæsthetic leprosy, the changes seen in the nerve-trunks (median and ulnar) and muscles of the arm upon dissection, the minute appearances seen in the nerves upon microscopical examination, together with the microscopic characters of the leprous neoplasm, and he paid a well-merited compliment to the zeal and success with which Dr. Vandyke Carter has pursued his investigations. It is to be hoped that Dr. Carter's drawings and facts will be published, since they would constitute a most valuable addition to our present knowledge of leprosy.

Mr. Wilson gave as the duration of tubercular leprosy ten to fifteen years; of the anæsthetic, fifteen to twenty years. The treatment, he observed, consisted first of all in hygienic means, such as removal from a climate where leprosy exists, due exercise, good food, exhilarating society and occupation, the use of baths and the observance of cleanliness, together with nutritious food. Medicines failed to do any special good, yet ordinary tonics—quinine, arsenic, iron, cod-liver oil, and the mineral acids—were to be commended as improving the general health. Drs. Danielssen and Boeck's suggestions, and some other recommendations, were passed in review, and this brought the lecture to a close.

Analytical Records.

THE NOVARINTA OF MESSRS. WARD AND SON.

MESSRS. WARD & SON, of Mayfair, have recently imported a new Spanish Red Wine, which bears the name of "Novarinta." Basing our judgment on the samples of this wine subjected to our examination and analysis, we find it to be a deep-coloured, full-bodied wine, having many of the characteristics of port, but yet with flavour peculiar to itself. One hundred parts of this wine on analysis furnished the following results.

	Per cent. of composition.
Specific gravity at 60° F., 1·0157.	
Total solid residue at 230° F.	7·685
Residue on ignition...	·337
Alkalinity of residue = to caustic potash (KHo)	·112
Bitartrate of potash	·135
Phosphoric acid ($POHo_2$)	·055
Total acid	·465
Fixed acid = to tartaric	·4016
Volatile acid = to acetic $\left\{\begin{matrix}CH_3\\COHo\end{matrix}\right\}$ ...	·0634
Absolute alcohol by weight...	14·934
" " volume	18·00
Equal to proof spirit at 60° F., after Sikes	32·58
Grape sugar	6·33

This analysis shows this wine to be exceedingly rich in

all the constituents of the grape; the amounts of extractive being unusually large, and the alcohol not exceeding that which may be fairly present in natural and unbrandied wines.

Novarinta may therefore be regarded as a rich and sustaining wine, well adapted to replace in the markets cheap ports, and is well suited for hospital uses.

The samples submitted to us were evidently somewhat new, and we doubt not that this wine would be very greatly improved by being kept for two or three years. We should expect that it would furnish a particularly rich and thick crust.

ROBUR.

Some two or three years since an article was brought out under the names of the new spirit, tea spirit, and robur, this last being the designation by which this combination is now generally known.

It consists of alcohol with the constituents of tea and certain flavouring substances, and is free from, so far as we have been enabled to discover, admixture with any injurious substance, including fusil oil, found in many inferior and ill-rectified corn spirits.

The combination of spirit and tea is by no means a new or uncommon one, and we are all familiar with it in the form of a small addition of brandy to our matutinal cup of tea when the stomach is weakened or overtaxed, and requires a little stimulus. In such cases the combination often exerts a beneficial effect.

That the tea modifies the action of the spirit is unquestionable; but the precise physiological action and effects of the continued use of such a beverage must be determined by experience.

HUNYADI JANOS WATER.

This mineral water contains a large quantity of sulphate of magnesia and sulphate of soda, Epsom and Glauber's salts, and hence it will be found to be a very useful saline aperient. Baron Liebig affirms of it that its richness in these salts surpasses that of all other known waters. The wholesale agent is Mr. Cyriaux, 7, New Basinghall-st., E.C.

GUARANA.

Guarana (prepared by Grimault and Co., Paris) is the dried juice and seeds of *Paullinia sorbilis*. It is very similar to cacao, and Dr. Stenhouse showed many years ago that it contained no less than five per cent. of caffeine, a larger proportion than the strongest tea. The sample sent to us is in fine powder, and, when treated by the well-known lead process, gives beautiful crystals of caffeine. It is said to be a valuable remedy for sick-headache, neuralgia, and some stomach affections. The London agents are Messrs. Newbery and Son, Newgate-street.

EFFERVESCING LOZENGES.

We have before us several samples of these lozenges, adapted for different uses. One is labeled the "solid thirst-quencher," and is recommended to "clergymen, singers, actors, and public speakers." It appears to be an ordinary effervescent saline mixture. Other samples contain definite doses of well-known medicines, such as jalapin, chlorate of potash, and carbonate of iron. We have ascertained by analysis that their composition agrees with their description, and think they are worth a trial. Manufactured by W. T. Cooper, 26, Oxford-street.

COD-LIVER OIL CREAM, WITH HYPOPHOSPHITE OF LIME.

It is stated that every tablespoonful of this preparation contains two teaspoonfuls of pure cod-liver oil and two grains of the hypophosphite. This description appears to be accurate. The cream is smooth, destitute of disagreeable smell, and has little taste beyond that due to the hypophosphite. It is evidently made of good materials and with proper care. It is prepared by Wyleys and Co., of Coventry.

DAVIES'S EFFERVESCING CHALYBEATE SALINE.—DAVIES'S EFFERVESCING ALKALINE SALINE.

These are both well-prepared effervescent medicines. Their nature is sufficiently indicated by their titles, which, as we find by analysis, describes them correctly. They are prepared by Mr. M. P. Davies, Chemist, Tenby.

MAMMA'S MANNA BISCUITS.

All that we can say of these biscuits is, that they are sweet and well made, and really contain manna, as we have proved by extracting mannite from them. They are made by the Ladies' Work Society, 27A, North Audley-street, W.

New Inventions.

CHING'S PATENT VENTILATORS.

So much has been lately said and written about "wholesome houses," that we are glad to notice any system of ventilation likely to ensure the proper diffusion of pure air within the walls of a building. A plan has been recently submitted to and tested by us that appears worthy of attention. Fig. 1 represents a front view of a self-acting outlet ventilator. Fig. 2 represents the back view of the same, for ventilating through chimney breasts, into smoke flues or other shafts, or direct into the open air. It consists of a framework and box, the former of which is divided into four compartments. An equal number of valves opening outwards are fitted to these compartments, these valves being made of mica and very lightly hung, so as to act with the smallest appreciable motion of air. The inlet ventilator is shown by Fig. 3, and is constructed so as to be fixed in the skirting of the room, about four or six inches from the floor, having a pipe communicating with the outer air, and covered externally by an ornamental air-brick flush with the wall of the house. The circular cover of the internal inlet is fitted with a central screw, over a disc of wire gauze which renders it draughtless, so that the entrance of air, filtered from without, can be regulated at will, or the inlet can be closed altogether. The rotary front plate assists in a great measure to diffuse the current of fresh air as it enters. A turret ventilator has been designed for churches, glass roofs of staircases, ventilating shafts of sun-lights, &c., which is a conical framework containing a number of mica-valved compartments similar to those above described. Fig. 4 is a section of the Turret Ventilator, showing the position of the internal flaps. The system appears to possess many elements of success. The outlets can be increased to any requisite extent; and the mica valves prevent any return-current of air, and act exceedingly well. We take it, however, that where a large central hall and staircase exist, it would be better to fix the inlet ventilators in an inside rather than an outside wall, so that the room may be, in fact, ventilated from the hall rather than from the external air. This apparatus is called Boyle's Patent, and is manufactured by Messrs. Comyn Ching and Co., Little St. Andrew-street, Upper St. Martin's-lane, W.C.

FIG. 1.

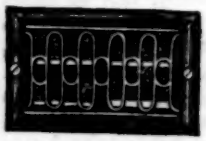
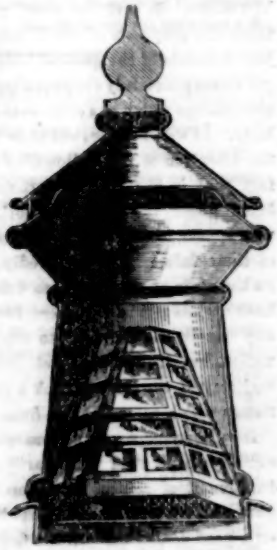


FIG. 2.

FIG. 3.

FIG. 4.



THE LANCET.

LONDON: SATURDAY, FEBRUARY 15, 1873.

ON Tuesday next (the 18th inst.) a very important discussion will take place at the Comitia Majora of the College of Physicians. It will be remembered that, some little time since, the Council of the College, feeling that it was impossible any longer to ignore the general dissatisfaction which prevailed in regard to the existing system of nomination to the Fellowship, themselves undertook to reconsider the whole matter, and report thereon to the College, with suggestions for amendment. This they have now done; and we print, in another part of our columns, both the Council's report and a resolution of a much more advanced character which will be moved by Dr. C. J. B. WILLIAMS. It will be seen, presently, that we cannot think the proposals of the Council sufficient to satisfy the just demands of the general body of Fellows and Members; yet we may certainly congratulate the College on the remarkable change which has come over the spirit of the governing body. It will be observed that the Council propose to call the attention of the Fellows, by an annual circular, to the fact that it is not merely their right, but their duty, to bring under the Council's notice the names of Members who appear to deserve the Fellowship, stating the grounds of their claims. This assuredly shows a vast improvement on the state of things which existed but a very few years back; when not merely were the Fellows entirely without any constitutional right to suggest candidates for nomination, but it was very well known that the Conservative majority of the Council took a ridiculous pride in rejecting names which came to them from without their own body.

It is, however, a very serious question whether the College should accept, even temporarily, the exceedingly moderate instalment of reform now offered by the Council. For our own part, we cannot doubt that the Fellows ought to insist on a good deal more. In the first place, in order to remove all suspicion of favouritism in the Council's nominations, that body ought certainly to be required to state to the College the exact grounds upon which they propose any particular member for the Fellowship—a regulation which would infallibly have prevented the notoriously unjust preferment of several entirely undistinguished persons, even in recent years. In the next place, there certainly ought to be some remedy for the absolute power of veto against the nomination of any suggested candidate which the Council at present possess. We cannot go the length of Dr. WILLIAMS's proposal that the list of nominations shall be suspended in the College, and that the Fellows at large shall be at liberty to add as many names to it as they think fit—for this would bring too many names ultimately before the College; and we cannot think it desirable either that there should be a hot contest to get particular men elected, or, on the other hand, that the value of the Fellowship, as a distinction, should be lowered by a very large increase in the number annually elected. But we are clearly of opinion that there ought to be some redress against the Council's veto, and would suggest the following scheme: On the occasion of a particular Member, whose name has been suggested to the Council, being passed over by the latter body, it should be competent for any *ten* Fellows to nominate him (on clearly specified grounds), and submit his claims to the test of ballot by the whole electing body. It seems to us that this would be but the barest justice; for the Council, in its secret conclave, might have been misled, as in past years it unquestionably has been seriously misled, by rumours about the professional or social character of individuals which were the mere product of a spiteful imagination. There could be no reasonable fear that the general body of Fellows would let a really objectionable person in when their attention had been called, by the provisional veto of the Council, to the necessity for reflection on his claims and demerits. It is quite idle to say that such a plan would inflict greater injury, in the end, on those who failed after all to be elected than could have happened under the old system. Those who say this must be very thoughtless, or quite ignorant of what passes in the professional world of London; for the fact is that the persistence of the Council in passing over the names of various Members who were *primâ facie* eligible for the Fellowship has, in many known instances, inflicted most serious injury on the professional prospects of those individuals.

THE earthquake at Lisbon was followed by an upheaval in the Bay of Naples; and the scheme of university reform on the banks of the Liffey is already awakening a sympathetic tremor on those of the Isis and the Cam. Academic education, indeed, is about to undergo a searching scrutiny; and academic publicists are not wanting who, prejudging that education to be defective or out of date, are clamorous for a change, not to say a revolution, in the traditional system. Among these men Dr. LYON PLAYFAIR holds a conspicuous place, and not undeservedly. Education, in the abstract, if but partially in the concrete, has been the business of his life. Himself a practical teacher, and a not undistinguished occupant of a professorial chair, he has in the present Parliament given ample proof that education, in its legislative aspects, has a congenial interest for him. He has been a consistent while a temperate advocate of what the Germans call "Real studien" in our foundation-schools; and no æsthetic weakness in favour of the "classics," or indeed of "literature," has impaired his apostleship in favour of elementary science. As the representative of the Universities of Edinburgh and St. Andrews, he is listened to with respect, even when avowing opinions and expressing himself in language to which his more cultured constituents would be slow to commit themselves; while in his speeches out of session his views are entertained and canvassed with the attention to which his undoubted devotion to his favourite subject entitles them. His most recent deliverance is that of the 8th inst., when he addressed the St. Andrews Graduates' Association on the "Universities in their relation to Professional Education." The bulk of his auditory being medical by culture and avocation, his remarks were specially pointed at the kind and degree of training, preliminary and

professional, which the graduate in medicine is required to undergo. Dissatisfied with the traditional state of things, he is not conciliated by any of the various schemes for reforming it; and he makes suggestions of his own which at the present juncture of the question are not without relevance, and sometimes force.

We need not follow him, or rather Sir ROBERT CHRISTISON, in his references to the rise and constitution of universities. We prefer to join him at the stage where his knowledge and conclusions are at least not second-hand. He is dissatisfied with the arts curriculum which has hitherto been held to prepare the priest, the lawyer, and the physician for a professional career; and, while admitting the necessity for such a "propaedentik," as the Germans say, he would modify its tenor considerably. He would make it conform as nearly as possible to the young student's prospective calling. He would exact from him a B.A. degree; but he would have it reached, "not by one road only, but various converging roads, suitable to the varying kinds of knowledge required by different professions." The universities should grant the B.A. degree to everyone who has passed his preliminary examination, even though that examination exclude Greek and all but a modicum of Latin. There would thus be a B.A. degree embracing one set of subjects for the medical matriculant; another set for the theological; a third for the legal. The intellectual discipline which the future divine or lawyer would derive from HOMER or HORACE, the future physician would be expected to draw from GOETHE or VOLTAIRE; while elementary chemistry and botany would represent to the latter the culture derived by the two former from logic or ethics. The list of optional subjects would, in the medical matriculant's case, be almost indefinitely elastic; and so long as he evinced tolerable proficiency in some four or five of them he would be entitled to the degree of B.A., and thereafter commence his professional studies.

By the more enlightened of our own profession this proposal will not, we think, find much acceptance. It seems to originate in a radical misconception of the end and aim of general as distinguished from special culture. The classics and mathematics or logic constitute, in BACON'S language, that main and common way before the "sciences"—that is, the professions—"do part and divide themselves"; the way on which the youth, whether his destination be the bar, the church, or physic, must travel if he wants to bring his mind under the influences at once most invigorating, most refining, most beneficial to its development. The Latin syntax, as Sir WILLIAM HAMILTON long ago pointed out, is the finest exercise of an applied logic. The Greek literature is the fountain at which the purest æsthetic minds have consciously or unconsciously drunk. The reason and imagination, the two poles of the human intellect between which the intermediate faculties oscillate, are thus kept in highest form by the discipline which feeds them best; while they derive additional life from the nurturing virtue of the mathematical and ethical palæstra. A better "propaedentik" for the physician's, or indeed for the professional, career could not be devised; and Dr. PLAYFAIR is quite uninformed when he asserts that, with the exception of HARVEY, it is difficult to find among our medical discoverers "one with even a respectable knowledge of classics." What! has he never heard of SYDENHAM? of MEADE? of HEBERDEN? of WILLIAM HUNTER? of MASON GOOD? of JAMES GREGORY? Dr. LYON PLAYFAIR may plead his non-medical culture in explanation of his ignorance of these, to say nothing of the great Dutch and Italian physicians; but surely he ought to have known better than to cite the author of the "Principia" and YOUNG (distinguished as much in Greek and philology as in physics) as owing nothing in the cultivation of the intellect to classical education.

It is provoking, just when improved methods and manuals in the teaching of the classics have so greatly abridged the time employed in their acquisition, to find the study relegated to the limbo of mediæval scholasticism. But we have as little fear that Dr. LYON PLAYFAIR'S counsels will be followed in the preliminary as in the professional education of the graduate in medicine. The concluding portion of his address reveals him in stronger force than ever as the avowed opponent of the one-portal system. Admitting the laxity of examination "on the part of some of the nineteen licensing bodies in the United Kingdom," and conceding the right of the State "to fix its own standard of qualifications for licences involving civil rights and affecting the health of its citizens," he contends that the one-portal system, as aiming at a uniform minimum of qualification, must necessarily lower the standard throughout the country. How so? To begin with, the minimum of the one-portal system, if only a little higher than the minimum of certain corporations, would, if reached by all candidates, imply a much wider uniformity of proficiency than at present exists in the profession; and, in the next place, there is nothing to prevent that minimum from being gradually elevated from year to year as science and education advance. Further, there is really nothing in Dr. LYON PLAYFAIR'S objection to the one-portal system that it annuls that wholesome variety of tradition and culture at present kept up by different centres of study and qualification. The proposed minimum standard insists on all possessing those essentials of medical knowledge in which variety is impossible as synonymous with error or defect on one side or the other. After those essentials are guaranteed, it will be time enough for the Irish graduate to "differentiate" himself from the Scotch, and both from the English, and to preserve whatever "variety of tradition or culture" may seem to him desirable. But Dr. LYON PLAYFAIR reserves his strongest argument against the one-portal system to the last. The Scotch students, it appears, are poor, and want to embark on professional life at as early a stage as possible. If by a conjoint scheme you provide them with a minimum qualification, you leave to the universities "the mere ornamental position of offering a more extended curriculum and higher qualifications, and you expose the poor students to an irresistible temptation to be satisfied with the minimum and to neglect the maximum." This is an inference not very flattering to the Scotch student, and it is one which he is likely to repudiate with indignation. Once let him understand that, in addition to the minimum, the acquisition of the maximum gives him a better chance of professional success, and he will be untrue to all his traditions if he refrain from enrolling under the higher as well as the lower standard.

But, after all, it is in the interests of medicine and of the *salus populi* that the one-portal system is proposed. Secure efficiency in the general practitioner, and you will at once elevate the profession in its own and in public estimation.

IF any evidence were required to show that the results obtained by Dr. BASTIAN in his experiments on the production of the lower forms of life, as represented by bacteria, vibrios, leptothrix filaments, and the like, require the most careful and frequent verification by unprejudiced observers, before they can be accepted as proven facts, it would be found in the correspondence that has lately appeared in our contemporary *Nature*. In the first volume of Dr. BASTIAN'S work (vol. i., p. 360) he says that in *no case* has a properly prepared infusion of turnip failed to yield an abundance of living organisms (in closed flasks after boiling) in the course of from two to six days, although the reaction of the infusion *was always decidedly acid*. In other experiments he observed similar organisms in closed flasks containing either a solution of ferric and ammonic citrate, or of neutral ammonic tartrate and neutral sodic phosphate, in distilled water, opened about a month after they had been hermetically sealed in the act of boiling. These statements were received by most physiologists as provisionally accurate only, and as requiring further verification by varying the conditions of the experiments. In one of the letters referred to, Dr. BURDON-SANDERSON states that not long ago he witnessed the opening of a number of experimental flasks charged many months previously by a friend with infusions supposed to be similar to those recommended by Dr. BASTIAN. On careful microscopical examination, however, no living organisms could be discovered. Dr. SANDERSON, therefore, proceeded to experiment for himself; and having charged calcined tubes with the liquids, sealed them hermetically, and forwarded them to Dr. BASTIAN. When he next saw him, Dr. BASTIAN pointed out that two of the three liquids used were not those which he had recommended; that if the infusions had been properly prepared there would not have been any necessity for keeping them many months before examination; that his results with organic infusions were obtained after a few days, and that they were *generally* of a most unmistakable nature. Dr. BASTIAN then offered to repeat his experiments in Dr. SANDERSON'S presence. Considerable care seems to have been taken in preparing the turnip infusion, in seeing that the fluid was boiled, and the flasks closed during ebullition. Some of the acid infusion was neutralised with liquor potassæ, and to some a little pounded cheese was added prior to the boiling. Some hay infusion was made at the same time. The flasks were examined at the expiration of three days, and the results of the examination were exceedingly unsatisfactory; for out of five experiments with the turnip infusion no less than four failed. The flask containing neutral turnip-infusion with cheese presented many active bacteria and some leptothrix filaments; but a second flask containing unneutralised turnip-infusion with cheese, a third with neutral turnip-infusion without cheese, a fourth with unneutralised turnip-infusion without cheese, and a fifth with diluted turnip-infusion, were all destitute of life, and presented no alteration. The hay-infusions were successful, and contained numerous bacteria. These results, in view of Dr. BASTIAN'S former statements, are certainly very astonishing. They seem to have surprised Dr. BASTIAN as well as Dr. SANDERSON, for a new set of experiments was at once commenced to ascertain whether the presence of some of the *rind* of the turnip had not exerted a prejudicial effect on the development of the bacteria; and four experiments were made, this part of the turnip being excluded. All were *successful*, though there were great differences in the number of bacteria developed in two flasks prepared in precisely the same manner—a significant fact. Lastly, Dr. SANDERSON undertook a third series of experiments to ascertain whether calcining the flasks previously to the introduction of the infusion made any difference. It did not: bacteria appeared in abundance. In another communication to the same journal, Dr. RAY LANKESTER states that, in conjunction with Dr. PODE, he has made numerous experiments with turnip-infusions, but being unaware of the precise specific gravity of the turnip-infusion used by Dr. BASTIAN, and being also ignorant of the deleterious influence of the rind, his experiments have uniformly failed. Now it is obvious that, if so small a matter as the introduction of a little of the rind into a turnip-infusion renders the whole experiment futile, many other points require most minute investigation. Especially is this the case with the cheese, the effects of different quantities and qualities of which, and, above all, of its state of aggregation, demand careful comparative researches; for it is easy to conceive that in a fragment the size of a pea or larger, and permeated with mould, the action of heat, continued for a few minutes, may be insufficient to destroy the vitality of all the germs which might constitute the origin of the bacteria. At all events, most persons will, we think, be disposed to hold their judgment in suspense in regard to archebiosis under these conditions, and *a fortiori* in simple saline solutions.

IT is reported that Mr. STANSFELD does not propose to proceed with public health legislation in the present session of Parliament. He is desirous, it is said, to see the organisation under the Public Health Act of 1872 completed before he ventures to seek further amendments of the sanitary laws. This postponement is almost necessitated, we must confess, by the results which have hitherto followed upon the mode in which the Local Government Board has endeavoured to initiate the Act. The six months which have been already given to this work have been productive of almost hopeless confusion among rural sanitary authorities as to the principles and practice which should guide them in working the Act. Another six months will hardly suffice to put the organisation of the authorities generally in working order, however incomplete that order may be. We anticipate that Parliament, at the close of the present session, will have to contemplate the spectacle of an Act from which it anticipated much largely frustrated in detail by the action of the Board entrusted with its control and initiation. The Act itself is not accountable for the almost utter disorder which exists among local authorities in carrying it into effect. For this result the mode of initiation adopted by the Local Government Board is mainly

responsible. It alone is answerable for having entrusted this all-important duty to inspectors who had no previous acquaintance with the subject-matter of the Act, and who, in the exercise of former more restricted duties, had shown so little apprehension of this subject-matter as to suffer to grow up under their inspectorate, undetected, because unappreciated, those grave scandals of workhouse sanitary management which it was the painful duty of THE LANCET to bring to light. Mr. STANSFELD'S policy of leaving it to these gentlemen to work out the question of public health organisation with the various local sanitary authorities, by inviting and promoting conferences of these authorities to discuss the different questions involved in public health organisation, is amazing. It is true that he followed the course that had been pursued by the Poor-law Board with so much success in dealing with the question of out-relief administration. But the success here arose, not from the conferences as conferences, but from the fact that the inspectors on the one hand, and the guardians on the other, were dealing with a subject quite familiar to them in all its details—a subject, moreover, respecting which each inspector brought to the aid of the conference in his district the matured experience and wide knowledge of the Poor-law Board of the subject under consideration. But this kind of knowledge, the essential element of success, was altogether wanting in the conferences on the Public Health Act with the rural sanitary authorities, and the lamentable results up to the present time are known.

The numerous inconsistencies, contrarieties, incoherences, and futilities of organisation now threatened and partially carried out, will lead to difficulties, some of which will probably need the aid of Parliament to solve, and others will certainly require protracted action on the part of the Local Government Board to undo. The very organisation which was to have been the preliminary step to a sounder and more thorough administration of sanitary laws will, too commonly, become an impediment to such administration. That this state of things must prove an obstacle and seriously affect further sanitary legislation will be obvious; and we believe that it must lead to a longer postponement of the urgently needed amendments of the Public Health Act than one session of Parliament; unless, indeed, public opinion should declare itself very strongly against such delay.

Medical Annotations.

"Ne quid nimis."

THE DEATH UNDER NITROUS OXIDE GAS.

OUR columns contain this week a report on the recent case of death under nitrous oxide gas at Exeter. The report is accompanied by a letter from Mr. Braine, which, in so far as we are concerned, we insert with pleasure. Neither document in the least degree, by any evidence of fact rendered in it, controverts the position we have taken in respect to this painful accident. In the report, Dr. Pattinson's statement as to the effect of the gas on the pulse is modified from that which he made at the inquest, and on which we commented; but we are inclined to think that his first opinion, given while the facts were fresh on his mind, is, after all, most likely to be correct. The other statements in the report are conclusive of the view that the death occurred from paralysis of the muscles of inspiration. The hypothesis of escape of blood into the glottis is utterly disproved by Mr. Mason's clear evidence; the suspicion that a small portion of the gag got into the glottis and was the cause of suffocation (because ten days after the event a bit of the gag was found to have been broken off it), extreme conjecture as it is, is removed by the truth that the dangerously urgent symptoms appeared while the gag was still firm between the teeth of the patient. In like manner all the other hypotheses as they are examined prove simply untenable. On the other hand, the positive evidences of the immediate cause of death, the continuance of expiratory sounds under the influence of artificial respiration, the dusky, tumid face, the protruding eyeballs—these all indicate, as plainly as symptoms can indicate, that the inspiratory muscles had been rendered suddenly and hopelessly powerless.

We have felt it a duty to deal plainly with the subject under consideration, but we leave it without prejudice. We ask only that there be not too ready an acceptance that what has occurred is from anything else except the true cause of the occurrence. The unmistakable fact is, that the patient would not have died when she died and as she died if nitrous oxide gas had not been administered to her. Mr. Braine, who says she did not die from the effects of the gas, will hardly, we think, dispute this position. We hold that the death, which was clearly caused by arrest of respiration, was the logical sequence of the action of an agent that produces the most perfect possible suspension of respiration. We hold that the fine line between life and death, so often approached under the use of this gas, was this time crossed into death.

PRELIMINARY SCIENCE AT THE UNIVERSITY OF LONDON.

IT may be remembered that in October last some discussion was excited by the alleged high standard of questions set in Mechanical and Natural Philosophy at the Preliminary Scientific Examination for the degree of Bachelor of Medicine of the University of London. At a meeting of a Committee of the Senate of the University on Nov. 20th the questions in these subjects at the last examination were considered, and were referred to two non-medical members of the Senate for a report. These gentlemen reported at a subsequent meeting, when the Committee sent the following resolution to the Senate: "The Committee see no reason to dissent from the judgment of the Examiners as regards the results of the First B.Sc. and Preliminary Scientific (M.B.) Examinations." Mr. Spottiswoode, one of the referees, also appended the following opinion to his report: "The advanced character of the questions might, he apprehended, be partially accounted for by the fact that, with the exception of the examinations in Experimental Physics for the degree of Doctor of Science, this is at present the highest examination in that subject."

This opinion by Mr. Spottiswoode contains, we think, the whole pith of the matter. Our complaint is that candidates for a medical degree who have before them two more examinations before they attain their goal are submitted to the same tests as candidates for a degree in science, of which the examination in question is the first stage corresponding to the first M.B. The argument that medical candidates are spared the mathematical papers which the science candidates have to write, is absurdly fallacious; for it is evident that the mathematical training thus enforced gives the science candidates great advantages in attacking the papers on mechanical and natural philosophy. The Senate, no

doubt, consoles itself with the knowledge that the rejections at the Preliminary Scientific Examination are not *all* due to the Examiners in Mechanical Philosophy; but we maintain that they are greatly due in fact to the fear of these examiners entertained by the medical candidates, who are thus induced to devote too large an attention to their subjects to the neglect of others not less essential. But an examination of the results of the last few years shows that the majority of the rejections are really due to those same Examiners in Physics. In 1870 there were 98 candidates for the combined examinations, of whom 64, or 65·3 per cent., were rejected. Of these 64 rejections, 52 failed in natural philosophy, and 50 in mechanics; 36 in zoology, and 16 in chemistry. In 1871 there were 118 candidates, with 75 rejections, or 63·5 per cent. Of the 75 rejections, 63 failed in natural philosophy, 65 in mechanics, 44 in zoology, and 31 in chemistry. In 1872, of more than 200 candidates for the combined examination, only 66 passed; among the rejected candidates being many men who have highly distinguished themselves both at the University itself and elsewhere. When we add that, in 1871, the proportion of *medical* candidates who passed was as low as 36 per cent., we think it will be obvious that the conclusion of the Committee of the Senate which we have quoted is opposed to the best interests of the medical profession.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

AT the meeting of this Society, on Tuesday evening last, an interesting paper was communicated by Mr. Callender "On the Removal of a Needle 1·9 inch long from the Heart, after it had been fixed there for nine days." The case was remarkable for the little discomfort it gave the patient, a pewterer, who was able to continue at his occupation for the above time; he only complained of pain in the left side and arm, due apparently to irritation of the intercostal and intercosto-humeral nerves. Nothing abnormal was noticed in the heart's action. This doubtless was due to the peculiar way in which the needle had entered the organ, its point being, as was supposed from its place of entrance and direction, fixed firmly in the muscular substance of the apex, whilst the end with the eye was loosely held by the intercostal muscles, so that the needle was able to move more freely at each movement of the heart. The patient was kept in bed for a month after the removal, and had shown no bad symptoms whatever.

A second paper was communicated by Mr. Gant "On a successful case of Excision of the Knee-joint in a woman, aged fifty-three, for rheumatic arthritis." The discussion that followed elicited an expression of disfavour towards such a proceeding at such an age and for such a cause.

A third paper, "On a successful case of Gastrotomy for Extra-uterine Pregnancy," by Mr. Lawson Tait, was then read. The paper showed the importance of early operation in such cases, and the good result from leaving the placenta and membranes in the open cyst, and allowing them to be discharged as the cyst contracted.

THE LATE AMERICAN EPIZOOTIC AMONG HORSES.

DR. ALBERT FRICKE, in a communication to the *Philadelphia Medical Times*, records the results of his observations of horses attacked with the disease which lately caused such havoc among these animals in America, with some post-mortem examinations, and the results of several microscopic examinations by Professor Joseph Leidy and himself. One of the most remarkable features of the disease was the rapidity with which it spread over the continent, appearing first in the far East, and in less than eight weeks reaching the sea-borders of Louisiana and Georgia, and it is still travelling west and south. This rapid spread, together with the symptoms of the disease itself, were very suggestive of its being closely allied to, if not identical with, the well known influenza of the human family. But Dr. Fricke seems to have arrived at the conclusion that the diseases are not identical, and that the horse disease depends upon a blood-poison far exceeding in virulence that which induces influenza. In the first place, the sum total of the mortality among the affected horses was great, and the symptoms in the graver cases were altogether of a much more formidable character than are encountered in influenza affecting our race. Dr. Fricke mentions that few horses escaped being attacked, and that out of 30,000 horses in Philadelphia, according to the official reports, over 2250 died in less than three weeks. The breathing in the horse in bad cases assumes a spasmodic character, and the distressed animal refuses to lie down almost to the last moment of life, and finally dies from exhaustion. Sometimes, about the middle or end of the third week, if the case progresses unfavourably, œdematous swellings make their appearance, the hair of the mane and tail falls out, the lining membrane of the nostrils becomes deep purple, and the animals become very feeble, with little hope of recovery. The disease exhibits well-marked anatomical characters in the mucous membrane of the nares, pharynx, glottis, larynx, and trachea, either by great congestion and injection of the vessels of the membranes lining these parts, which become covered with mucus or pus, or by the production of patches of false membrane. Dr. Fricke concludes, from these and other observations, that the disease is closely allied to the epidemics of diphtheria in the human family. The acute anæmia so generally observed is, he thinks, another evidence of its diphtheroid character.

COBRA POISONING AND ITS ANTIDOTE.

WE hear that Dr. Fayrer, who is now in England, has, since his arrival, been conducting a further series of experiments, in conjunction with Dr. Lauder Brunton, relative to the action of cobra poison, and with the special object of ascertaining the best means of defeating the apparently inevitable consequence of its operation upon the living body—namely, death. In these experiments, which have been performed upon fowls and rabbits, it has been proved that after the development in full of the poisonous action of the cobra virus, when, in fact, not only convulsions but total paralysis—which symptoms immediately herald the fatal issue under ordinary circumstances—have occurred, life may be prolonged for several hours by artificial respiration. In one case the experimenters were enabled to keep up the heart's action for no less than eight hours. This, in itself, is a promising result. It lends considerable support to the idea that if the heart's action in cases of snake-bite can be sufficiently sustained by artificial respiration, the poison may very possibly be eliminated, and time may be gained for the exhibition and action of remedies calculated in themselves to favour the elimination or neutralisation of the poison, and to stimulate the flagging vital powers. Dr. Fayrer lays much stress on the necessity of keeping up the warmth of the body by artificial means, as well as the respiration. The length of time during which it might be requisite to continue the artificial respiration, supposing the heart's action to continue meanwhile, may be a day or two, if the poison be not got rid of before that time, and in order to this end it would be desirable to perfect in every possible way the method of keeping up the breathing artificially.

In Dr. Fayrer's opinion the operation of the cobra poison is in many respects analogous to that of the curara of South America, which acts by paralysing the peripheral

distribution of the motor nerves, and induces asphyxia by its action on the muscles engaged in the respiratory act. On account of this analogy, and inasmuch as carefully sustained artificial respiration, in animals poisoned by curara, is attended by success in restoring life even in the case of animals apparently dead, it is hoped that like results may be obtained in regard to cobra poisoning. It has been suggested in a memorandum on this subject—which we have reason to believe has been submitted to the Indian authorities by Dr. Fayrer—that special experiments be undertaken in India to test the effect of prolonged artificial respiration and warmth in the case of animals artificially poisoned, and upon the human subject in cases of actual snake-bite, the secretions being tested for eliminated poison by their inoculation into small animals and birds. Of course, in some cases it will probably always be hopeless to expect any good results from treatment—in instances where a large dose of poison enters the system rapidly and freely, and through a vessel. But, on the other hand, the experiments of Dr. Fayrer seem to indicate in an unmistakable manner the probability that, when the dose of virus received is small, death may be averted by the steady employment of the means he has indicated.

We imagine the Indian Government will issue special instructions upon this question. The preventive means to be adopted are simple enough, and only want to be intelligibly put, and the instructions with regard to them could be translated into the vernacular and handed to the police for general distribution, and especially to dispensaries in India. Dr. Fayrer, we hope and believe, will continue his experiments. He is doing a most humane work for the people of India, and one that justly entitles him to the gratitude of its teeming multitudes.

STRUCTURAL COMPOSITION OF URINARY CALCULI.

THE Proceedings of the Royal Society for December last contain the abstract of a paper by Dr. H. Vandyke Carter on "the Structural Composition of Urinary Calculi," which merits some attention. Dr. Carter, during his late residence in Western India, was enabled to pursue an inquiry, begun in 1859, into the character of these concretions by chemical analysis, supplemented by microscopical investigation. The plan adopted was to submit minute fragments taken from the real or apparent nuclei, and from succeeding layer and crust of the nuclei examined, to the scrutiny of average optical powers, the highest available magnifying about 300 diameters. Distilled water was the ordinary medium employed, and chemical tests were used conjointly for the purposes of detection or confirmation. The microscopical analysis was found to be more delicate than the simple chemical method. No urinary deposit long retains an unmixed character. The author regards it as not the least interesting of his results to have determined the very frequent presence of urates in a globular form at the very earliest beginnings of these concretions. To this origin all varieties of calculous deposit may succeed. The next most common ingredient of the nucleus is oxalate of lime, and this, too, in a form not generally recognised—viz., as large rhombic crystals. The nucleus of a calculus was comparatively seldom found to consist of uric-acid crystals. Evidence was likewise elicited of the operation of known physical influences in determining the form which these globular and granular urates, commonly associated with oxalate of lime, assume in connexion with stone. Dr. Carter refers to the modifying influence of a colloid medium upon the process of crystallisation, so admirably illustrated in Mr. Rainey's well-known researches, and he concludes that urinary calculi should not be classed with ordinary concretions or mere mineral masses, although it is not evident that the animal basis of calculus, essential though it be, presents or retains a strictly cellular character.

MUSSEL POISONING.

A CASE of poisoning is reported to have occurred at Falmouth, by which three inmates of the union workhouse have lost their lives, and a fourth has narrowly escaped the same fate. It appears from the evidence taken before Mr. Carlyon, county coroner, that the union schoolmaster took fifteen boys for a walk on Mainforth Beach, where they were allowed to play and run about. They had only been on the beach a short time when a boy named Evan Sanders, aged five years, fell down in a fit, and was quickly followed by James Oates, aged eight, John Scoble, aged nine years and a half, and Thomas Masters, aged six years and a half. They were speechless from the first, and soon became insensible. Sanders, Oates, and Scoble died within an hour, but hopes are entertained of the recovery of Masters. Mr. F. C. Bullmore, surgeon, of Falmouth, who made the post-mortem examination, found a small substance very much like mussel in the intestines, but could not swear that it was mussel. It was known that there were plenty of mussels among the rocks. The jury returned a verdict that the deceased died from eating poison. The absence of any fragments certainly recognised as portions of mussel renders the cause of poisoning in this instance somewhat doubtful, though it is by no means certain whether if such fragments had been found the nature of the poison would have been ascertained. Mussels are well known to act occasionally as virulent poison. In Leith, in 1827, nearly thirty people were poisoned by mussels taken from a particular spot, yet neither Dr. Combe nor Dr. Christison was able to detect the presence of any mineral poison, such as copper, though this metal was found in a case recorded by Bouchardat. Dr. Lee, in the American edition of Dr. Copland's Dictionary, reports the case of a family of eight persons similarly poisoned by mussels. The father, who was an intemperate man, died; the others, though violently attacked, recovered.

There is strong reason for believing that the poisonous property is due to the food recently consumed by the animals, for perfectly harmless molluscs, as the oyster and periwinkle, have sometimes produced the same symptoms. So also some fish that are daily eaten, as the mackerel, halibut, and conger-eel, now and then seem to exert a poisonous action on the bodies, not only of men, but of animals, as the dog and cat. Dr. Fayrer informed Norman Chevers, as the latter relates in his excellent "Manual of Jurisprudence for India," that eleven girls of the European Female Orphan Asylum of Calcutta were poisoned by eating a Rohee fish, which is one of those commonly sold in the markets of Bengal. None of these girls, however, died from the effects of the poison. Dr. Collas also forwarded to Dr. Chevers a specimen of the Gobius crinifer, a well-known poisonous fish, sold in the bazaars of Pondicherry. The natives eat the flesh, but are very careful to remove the head and to clear out the whole of the intestines and abdominal viscera. The yellow-bellied sprat is another of these poisonous fishes. According to Beck, the mackerel caught off St. Helena are apt to produce unpleasant symptoms. Some years ago a cargo of oysters were sold at Dunkirk, and immediately an epidemic of cholera and diarrhœa broke out. Dr. Zandyck, however, could only attribute the symptoms to some animal poison. Here the animals appeared to have been in ill-health. The symptoms are generally strikingly similar, consisting of qualms in the stomach, succeeded by violent vomiting and purging, cold

sweats, feeble pulse, cramps of the muscles of the abdomen and limbs, and death. It is rare, however, for death to occur so rapidly as those reported from Falmouth.

ACTION AGAINST THE MEDICAL OFFICER OF ST. PANCRAS WORKHOUSE.

THE friends of an old woman aged eighty-six have recently sued at the Bloomsbury County Court, the medical officer, Dr. Hill, for £50 damages, on the ground that he illegally detained the woman in the infirmary wards. The old lady, habitually very deaf, on the 28th October got into trouble in the streets with some boys, sustained a fall, and was taken, much shaken and bruised, to the workhouse. Though in receipt of a few shillings weekly from the parish, she was able partially to earn her living. The friends wished to take her out before Dr. Hill thought her fit to leave. Failing to get his sanction, they referred to Mr. Pearse, the well-known medical guardian of this well-known parish. He, with characteristic zeal, espoused the cause of her friends and visited the patient in the workhouse, and then visited the doctor; but the medical officer would not allow any interference on the part of the medical guardian. Mr. Pearse, failing in his attempt to get the patient out, advised the friends to bring this action. The jury, however, in a few moments came to the conclusion that the medical officer had done his duty honestly. The judge said he thoroughly concurred with the jury, and granted an order for costs. We entirely agree with both judge and jury. What better place could there be for a woman of eighty-six, bruised, deaf, and imbecile, until she recovered herself than the workhouse infirmary to which she was taken? Dr. Hill had the power to retain her there till he thought her fit to be removed. And we must praise him for his discretion in acting wisely, as far as the patient was concerned, and for his independence in regard to the interference of a medical guardian.

THE DENTAL HOSPITAL OF LONDON.

THIS institution, which has done good work for many years in an obscure corner of Soho-square, is about to be moved to more eligible and commanding premises on the south side of Leicester-square. At the annual meeting of the Governors, held on the 30th ult., the question of removing at once, or of waiting for the chance of a more eligible site for the hospital and dental school attached, was fully discussed, and it was finally determined to embrace the proposal to remove to Leicester-square, which emanated, we believe, from Mr. Edwin Saunders, who has always taken a most active interest in the welfare of the charity. The Odontological Society of Great Britain, which has hitherto met in the rooms of the hospital, will, we understand, continue its connexion with the Dental Hospital; but the General Medical Council and its Registrar, who have also occupied rooms in the same house, have, as we announced last week, been already provided for elsewhere by the Government.

POST-MORTEM EXAMINATIONS IN IRISH WORKHOUSES.

IF our information is correct, the Local Government Board of Ireland is behaving with undue severity to Mr. Laffan in the matter of the pauper who willed his body to Mr. Laffan for purposes of post-mortem examination. It has actually called on the board of guardians to ask him to resign his office. Fortunately, the board of guardians whom Mr. Laffan serves appreciates its medical officer, and is unwilling to ask him to resign. A medical officer, as a rule, should procure post-mortem examination by other means than getting patients to will their bodies. But this was an exceptional case, though even here Mr. Laffan did not act without acquainting the master with the fact of the will, and he forbore to act against the master's permission until he had consulted the Local Government Board on the legality of action without the consent of the master. The reply of the Local Government Board to Mr. Laffan's inquiry was that his conduct in getting the pauper to will his body was reprehensible, and the guardians were requested, as we have said, to make an example of it by asking for resignation. We fail to see that Mr. Laffan has violated any law. But even if he has, his dismissal is a punishment absurdly disproportionate to his offence. And we sincerely trust that the guardians will be resolute in determining to retain their excellent officer.

STRUCTURE OF THE SCALP OF THE NEGRO.

IN a paper read before the Microscopical Society, and reported in the *Monthly Microscopical Journal* for the present month, Mr. Charles Stewart gives the result of his investigation upon the appearance presented by sections of the scalp of the negro. In this, he says, besides the dark colour which is due to extra pigmentation of the deep layer of the epidermis, there are certain peculiarities that have not received general attention. The scalp is altogether thinner, and the hairs and follicles present the following remarkable differences from those of the European. In the first place, the portion of the hair and follicle imbedded in the skin is much longer, and is also remarkably curved, so that it commonly describes a half-circle. The papilla at the base of the follicle consequently either lies horizontally or even becomes directed obliquely inwards towards the subjacent bone. Lastly, the sebaceous gland is somewhat smaller.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

THE annual meeting of the Association for the election of officers, &c. (which has been unavoidably postponed), will be held at the Medical Club, 9, Spring-gardens, on Wednesday, February 26th, 1873, at 3 P.M. precisely, when important matters connected with the future action of the Association will be brought forward for consideration.

As it is not improbable that legislative action will take place during the present session which will materially affect the interests of the Poor-law medical service, it is most desirable that there should be a good attendance of the members and friends of the Association.

RELIGIOUS MANIA.

PSYCHOLOGICAL medicine has to record an interesting case from Leicestershire. The Rev. W. March, late curate of Melton Mowbray, while residing at a friend's house, besought his host one morning to take out his right eye. That gentleman, on going to him, found he had cut off his right hand, and was in the act of injuring his right eye. Medical assistance was obtained, and the arm amputated, Mr. March remaining quite calm during the operation, and complimenting the surgeons (Messrs. Powell and Roberts) on their skill. Beside him on a table he had a Prayer-book and Bible, the latter open at the passage, "If thy right hand offend thee, cut it off." Hecker's "Religious Epidemics of the Middle Ages" contains no more striking story.

"Tantum Religio potuit suadere malorum"

is the natural comment on such a case of morbid self-mutilation. The seeming immunity from pain during the performance is another point of interest. It is generally the victim to acute mania that enjoys this anæsthesia, but intense preoccupation of mind can, as in this case, produce the anæsthetic state. Dr. W. A. F. Browne, some time

Commissioner in Lunacy for Scotland, in an able lecture on the exemption enjoyed by certain lunatics from pain, mentions that one of his own patients got up out of bed, "and, with a broken chip of his night-vase, cut off his genital organs, and thought it a capital joke!" In this case the victim had not, like the Rev. Mr. March, religious enthusiasm to sustain him, and the phenomenon is all the more interesting accordingly.

ECONOMY OF THE EALING GUARDIANS.

THE economical members of the Ealing Board have had a double triumph. They refused some time ago to subscribe to the Ealing Cottage Hospital. One of the paupers of the Union lately required amputation of the foot. For this purpose she was removed to the Cottage Hospital. The operation was performed by Mr. Goodchild, of Ealing, one of the medical officers of the Board, who made a fit charge of £5, which the guardians have disallowed. The Local Government Board sanctions the guardians subscribing to hospitals, that the paupers may have the benefit, in case of need, of such institutions. But the Ealing guardians are wiser in their generation. They refuse both the subscription and the fee. A similar bill of £3 was presented to the Board on the same day by Mr. Whitmarsh. The Board resolved to pay 30s. Medical officers of Unions who are going to operate on paupers in cottage hospitals should take care to get first an order from the Board. The Board clearly had an advantage on this point; but had they been generous, they would have allowed a well-earned fee.

ROYAL FREE HOSPITAL.

THE forty-fifth annual meeting of this excellent institution was held last week in the board-room of the hospital, Mr. James Hopgood in the chair. It appeared that during the past year 1551 in-patients had been under treatment at the hospital, of whom 1361 had been discharged cured; while the number of out-patients amounted to 44,913. Numerous alterations, hygienic and otherwise, were made in the building during the year, a portion of it being fitted up as a pathological museum. We are glad to state that the financial report was most satisfactory, a large balance (nearly £5000) remaining in hand after paying all items of expenditure.

THE ADULTERATION ACT.

THE Sanitary Committee of the Clerkenwell Vestry have recommended that the parish should unite with the Holborn and St. Giles's districts in the appointment of an analyst for the joint parishes, each parish contributing £100 a year towards the analyst's salary.

The Kensington Vestry have refused to appoint an analyst, though advised to do so by their own committee.

Dr. Hardwicke has been appointed analyst for the Paddington district at a salary of £130 a year.

"FAMILY JAM."

PARENTS and guardians with jam-consuming families should carefully ponder Dr. Meymott Tidy's recent exposure of a new source of dietetic danger. At the last meeting of the City Commission of Sewers Dr. Tidy (acting as Dr. Letheby's substitute) drew attention to the vast quantity of rotten and decayed figs now lying at some of the Thames wharves, he himself having seized and impounded several hundred boxes. These figs, which are full of maggots, are used principally in the manufacture of jam, a little fine seed being added, in order to give it the appearance of having been prepared from good fruit. Some honest but epicurean traders consider the addition of common glue *de rigueur*, which, gently boiled and triturated with the figs, produces a most toothsome and delectable "family jam."

LORD HATHERLEY.

OUR readers will be pleased to learn that the operation performed on Lord Hatherley for the extraction of a cataract is so far successful. The nature of the operation was a modified Graefe's extraction, the incision being made in the cornea instead of in the sclerotic, as in the original method. The iridectomy and subsequent stages of the operation were, we believe, conducted in the manner recommended by Graefe. It is to be regretted that his lordship is suffering from conical cornea in the other eye, which renders the organ almost practically useless. A successful issue to this operation will therefore be looked for with more than ordinary anxiety.

LORD OSSINGTON.

THE condition of Lord Ossington remains about the same, though the symptoms are, on the whole, rather more favourable. At the same time the indications are of a kind to forbid the indulgence of a hope that the improvement in his Lordship's health can be other than of a very slow and gradual character.

POISONING BY CARBOLIC ACID.

A MELANCHOLY accident occurred at St. George's Hospital on the afternoon of the 13th inst. One of the nurses gave half an ounce of the crude carbolic acid to a patient in mistake for a dose of senna mixture. The bottle containing the acid was, we believe, properly labeled "*Poison.*" The patient, who was much burnt about the lips and inside of the mouth, died collapsed within three-quarters of an hour.

AT a Congregation held at Oxford on Friday, the 7th inst., the degree of D.C.L. was conferred upon Dr. Lyttleton Stewart Winslow, the youngest son of Dr. Forbes Winslow. The subject of Dr. L. S. Winslow's thesis, read and defended before Convocation and the Regius Professor of Civil Law, was "The History of English Legislation on the subject of Lunacy from the earliest period down to recent times."

A DEPUTATION waited upon Mr. Ayrton, the Chief Commissioner of Works, a few days ago, on the subject of public bathing in Victoria-park. It is justly felt that the rules now in force with regard to bathers in the park should be modified to meet the requirements of the busy toilers of the east end of London.

THE Town Council of Sunderland, at a meeting of that body held on the 5th inst., resolved, by twenty-seven votes to seventeen, to accept the Government aid towards paying the salary of the medical officer of health about to be appointed by them.

THE late Miss Ann Smith, of Victoria-street, Newcastle-on-Tyne, has, amongst other bequests, left £100 to the Infirmary at Newcastle, and £100 to her medical attendant, Mr. R. Ellis.

A SUPPER at the British Embassy, Berlin, for 600 guests, which had been countermanded in consequence of the death of the Dowager Empress of Austria, was distributed by Lady Russell among the patients at the various hospitals.

THE sanitary authorities of North Hornsey have decided to appoint a medical officer of health, at a salary of £100 a year.

AN extremely satisfactory report of the vaccination performed in Leeds for the half-year ending June 30th, 1872, has just been made. Of 2887 children born and registered during that time, 2486, or 86 per cent., were successfully vaccinated. In one case only was there a refusal to obey the law.

ACCORDING to the last intelligence received from the Mauritius, it appears that fever was still prevalent in the colony, especially at Port Louis.

THE annual entertainment and ball given to the inmates of the Middlesex County Lunatic Asylum took place on Wednesday night.

A LADY—Miss Phœbe Blyth—has been nominated a candidate for election to the Edinburgh School Board.

ROYAL COLLEGE OF PHYSICIANS.

THE following is the report of the Council recently submitted to the College of Physicians upon the question of the mode of nominating members for the Fellowship:—

"In accordance with the resolution of the College of the 18th of October—namely, that the question of the mode of nomination of Fellows be referred to the Council for consideration and report—the Council begs leave to say that the subject referred to it has been most fully and carefully considered, and its report is now submitted to the College.

"The Council considers it desirable, in the first place, to remind the Fellows of the bye-law at present in force, having reference to this question. It is as follows:—

"'The Council shall annually, prior to the last Monday in July, nominate from the Members of the College of not less than four years' standing, those who, in their opinion, have sufficiently distinguished themselves in the practice of medicine, or in the pursuit of medical or general science, or literature, to be proposed for election as Fellows at the next ordinary general meeting of the College, and no member shall be so nominated who has not received the votes of at least ten members of Council.'

"In order to secure the attendance of members of Council at the meeting when the nominations take place, the bye-laws impose a fine of one guinea on each absent member of Council, and the Council now recommend as a further security for the fuller consideration of the merits of members, that the number required to form a quorum at that meeting of Council be raised to fifteen, the number of votes required for a nomination remaining as at present.

The College will readily believe that the Council, in the fulfilment of the difficult and responsible duty assigned to it, is most anxious that at the meeting or meetings held for the nomination to the Fellowship, the claims of every Member of the College should receive the most liberal consideration, and that no Member should have the slightest reason for supposing that his claims to the Fellowship have been either overlooked or neglected. With this view, the Council recommend the following plan:—

"1. That it be an instruction to the Council, in determining the fitness of Members for nomination to the College for election to the Fellowship, to take into consideration, in accordance with bye-law, chap. xi., sect. 4, standing in the College, academical honours, distinction in literature or science, professional eminence, public appointments, and social position.

"2. That in each year, three months before the meeting of the Council for the nomination of Members for election to the Fellowship, a notice to the following effect shall be sent to each Fellow:—'It is the duty of every Fellow to assist in the nomination of fit and proper persons to the Fellowship. The duty thus devolving upon every Fellow has respect to the College and to its Members: to the College, since it is only by the election of fit and proper persons into the Fellowship that the College can be advantageously extended and perpetuated; to the Members, since every Member ought to have full ground for believing that his claims to the Fellowship will not be overlooked or neglected. Your attention is therefore directed to the following regulation of the College:—'Any two Fellows of the College may propose for consideration of the Council for nomination for the Fellowship any Member of the College of at least four years' standing, who has distinguished himself in the practice of medicine, or in the pursuit of medical and general science, or literature.' The grounds of the recommendation must be fully stated in writing, for the information of the Council, and be forwarded to the registrar on or before the 24th of June.'

"The Council, in conclusion, begs leave to inform the College that, as an additional security against the claims of Members being overlooked, it has adopted the following mode of proceeding:—

"That in future the selection of Members to be nominated to the College by the Council for election as Fellows shall be conducted in the following way:—A month before the usual time of nominating, a preliminary meeting of the Council shall be held, at which a list shall be drawn up of those Members who are selected for consideration. During the interval between the meetings the members of Council shall carefully inquire into the merits or disqualifications of those Members whose names have been thus selected, so that at the final meeting of the Council for nomination it may be provided with more exact information than has hitherto been obtainable."

Such is the Report of the Council, and a meeting of the College has been called for the 18th inst. for its consideration.

Dr. C. J. B. Williams has given notice of his intention to propose the following resolution:—

"That the list of Members to be proposed by the Council for election to the Fellowship be laid before the Fellows before the end of May; and that it shall be open to the Fellows to add to the list the names of any other Members whom they may deem deserving promotion to the Fellowship, provided that each Member so proposed be recommended by at least three Fellows, with a statement of the grounds of their recommendation.

"That the list be then suspended in the Hall of the College until the Midsummer quarterly meeting, when the Members nominated shall be balloted for, and those shall be elected to the Fellowship who have a majority of votes of the Fellows present."

QUACK PROSECUTIONS.

WE called attention last week to the conviction at the Central Criminal Court of three persons engaged in carrying on Kahn's Museum in Tichborne-street, Haymarket, for the publication of an obscene book entitled "The Philosophy of Marriage." These prosecutions have firmly settled an important point at law, with great benefit to public morals. After so clear a warning, a repetition of the flagitious practices of certain advertising quacks will, without difficulty, be visited with the severe punishment they so richly merit. Before this trial it was a moot point whether the indiscriminate circulation of such books would be unlawful, if it could be shown that as medical books they treated of matters of which a general knowledge was necessary for the good of mankind. This position was further strengthened by the impunity during many years with which they had been circulated to a very great extent, especially among boys and young men. In this country there is no public prosecutor; thus what Mr. Knox recently designated as one of the greatest scandals of the metropolis has been allowed to flourish, because it was nobody's business to interfere.

Last spring a case of particular enormity came under the notice of the house-surgeon of the Lock Hospital, and led that gentleman to request the Society for the Suppression of Vice to take the matter up. He was informed that, though well aware of the mischief, the Society was powerless for the want of funds; could these be obtained, the necessary proceedings should at once be undertaken. Meanwhile, their solicitor was instructed to prepare a case

for the opinion of counsel, on the advisability of instituting prosecutions. The opinion was most decided that the nature of the books submitted rendered those circulating them open to indictments, and that it would be highly to the public interest to indict them. The case and opinion were printed and circulated privately among the medical profession, heads of colleges, head masters of public schools, and others cognisant of the extent to which the mischief had reached, with a letter asking for subscriptions to enable the Society to carry out the advice of its counsel. The result of this appeal permitted the Society to proceed simultaneously against the proprietors of some of the pamphlets. Into the details of these proceedings it is unnecessary to enter, as they were fully reported at the time in the public journals, and have already been the subject of remarks in THE LANCET.

Besides the cases which have been carried into the Courts, certain other notorious quacks have voluntarily surrendered to the Society their stock and stereotypes, including a book that contains a chapter on the readiest means of producing abortion, and have abandoned, for a time at least, their infamous traffic. It is a very remarkable fact, showing how well these people are aware of their crime, that after the first case was committed for trial, the long list of advertisements of this class disappeared from provincial newspapers, the columns of the metropolitan journals, with one or two exceptions, having been for some time closed to them, owing, we are led to think, not a little to our remonstrances on that score. Indeed, could the proprietors of those provincial sheets be induced to forego the profit from these advertisements, this nefarious trade would be at once destroyed by closing the channels through which these persons parade their names and addresses and their disgusting literature before the public. Newspaper publicity is indispensable to their business.

In conclusion, we suggest to those among our readers who wish for the suppression of this scandalous and demoralising nuisance, that they can afford material aid by subscribing to the fund which has been instituted for the purpose. The legal expenses already incurred greatly exceed the amount at present available; yet it is highly desirable that the proceedings shall be continued, and not, when so much has been achieved, be arrested by want of funds. Subscriptions may be sent to the care of Mr. Berkeley Hill, 55, Wimpole-street, W., or to the Secretary to the Society for the Suppression of Vice, 23, Lincoln's-inn-fields, W.C.

BREMBRIDGE v. HOARE.

THE above cause, which occupied the Court of Exchequer the whole of last week, and the details of which were, for obvious reasons, excluded from the general Press, will be found in its medical aspects to be one of the most important which has occupied the attention of any court for some years past. We feel sure that the following account of it will be studied with interest by all who are in any way called upon to advise insurance companies as to the value of insured lives.

The action was brought by Mr. Brembridge, one of the executors of the will of the late Mrs. Formby, against the Chairman of the Sun Life Insurance Company. Mrs. Formby at the date of the policy was twenty-eight years of age. She was the daughter of Mr. John Spencer Shuttleworth, of Hathersage Hall, near Sheffield. At this time she was the widow of Mr. Richard Formby, who died on January 18th, 1870, in Wonford Lunatic Hospital, near Exeter. He was an intemperate man, and believed to be the subject of syphilis. She was twice confined—in March, 1867, and in April, 1870; and, as it afterwards appeared, on both occasions instruments had to be used, and in one craniotomy was performed.

The medical officer of the asylum in which Mr. Formby died was Dr. Thomas Lyle. An intimacy sprang up between him and Mrs. Formby, and they were engaged to be married in November, 1870. In December of the same year she proposed to insure her life in the name of Dr. Lyle for the sum of £5000. She had a good income in her own right, which would pass from her at her death. She filled up the usual certificates, stating that her health was good, and that she had had no illness requiring the aid of a medical man except in her confinements and for passing ailments. She referred to Mr. Kempe. This gentleman died soon afterwards. Mr. Kempe stated in his certificate that he had attended her in two severe confinements, from which she made quick recovery, and once or twice for slight stomach derangements. The company wrote to Mr. Kempe for further information rerpecting the confinements, and he answered by saying that Mrs. Formby's labours were prolonged in consequence of a somewhat contracted pelvis and unusually large children, and he saw no risks in any future confinements more than ordinary. Dr. Samuel Budd, being the company's medical officer at Exeter, saw the lady, asked the usual questions, and all being satisfactory, recommended her as a good life. The life was, therefore, accepted on December 23rd, 1870.

The premiums were paid during the year 1871, and in March, 1872, notice was sent to the Society of her death, with a certificate from Dr. Tyler Smith, stating that she died on February 1st, at Park-street, Grosvenor-square, of an internal abscess, he having attended her for six or seven months. This certificate naturally suggested to the office some disease of the sexual organs, especially in connexion with the history of the instrumental deliveries. Dr. Tyler Smith was therefore written to by the Actuary for further explanation, and Dr. Tyler Smith replied by stating that the late Mrs. Formby consulted him in August for leucorrhœa, or the "whites," and that the inflammation, which resulted in abscess and so caused her death, arose from her sitting out of bed on a cold night in January without a fire, while menstruation was going on. The abscess formed around the womb, but no post-mortem was made. The managers still considered the certificate of death most unsatisfactory, not being able to understand why the lady had come to London to put herself under the care of a medical man five or six months for the "whites," and then unfortunately died suddenly of an abscess. After some hesitation they felt they could gain no better information than from her medical adviser, and agreed to pay the amount of the policy. Shortly afterwards Mr. Farquhar, one of the managers, received a letter from Mr. Shuttleworth, who was adverse to his daughter's marriage, stating that Mrs. Formby was in bad health at the time of the insurance, and that she had undergone an operation. Inquiries were then made, and numerous letters found relating to her condition. Amongst others, a copy of a letter from Dr. Tyler Smith to Dr. Lyle, dated August, 1871, stating that Mrs. Formby suffered from prolapsus, and as large and irritable an ulceration of the uterus as was often seen, and that the root of the whole matter was the perineum being torn in one of her confinements. He advised that the perineum be mended, and in future pregnancies labour be brought on at the eighth month. On Nov. 25th he performed the operation, assisted by his son. At the end of a fortnight the wound seemed to have healed, and in another week she came into the drawing-room, and dined there on Christmas-day. After that she had a relapse, again took to her bed, had rigors; an abscess formed behind the uterus, and this broke into the rectum; again another formed, which was believed to have broken into the peritoneum, as she had a sudden collapse, and the symptoms of such an occurrence.

It was also found that she had been under Dr. Graily Hewitt's care previously, and had been wearing a pessary.

Numerous letters of hers were found in which she always spoke of herself as nervous, excitable, and irritable, and expressed herself as pleased with Dr. Tyler Smith's letter about the laceration, for she said her friends would now believe there was something the matter, as she had always thought. About the time of her insurance and previously she had been under the care of Dr. Willis, of Monmouth, and Dr. Lyle had prescribed tonics and astringent lotions. It was not pretended by the Society that Dr. Lyle knew of

the lacerated perineum, or that she herself knew exactly the cause of her suffering. There was also some evidence to show that she had syphilis, as there was mention made of a rash, ulcerated throat, and the fears of Mrs. Formby herself. The managers of the Society, although wishing to give credit of good faith as far as they could, yet could not acquit Mrs. Formby of untruthfulness in stating she was in good health when, if she had said as much about her health as was contained in her letters, and had spoken of a chronic uterine discharge, her life would never have been taken, and her actual condition never known. The Office, therefore, refused to pay the claim, and an action for recovery was brought by her executors against the Company.

Mr. Hawkins opened the case for the defendant, commenting on Dr. Lyle's connexion with the transaction, and then brought forward witnesses to show the state of health of Mrs. Formby before and at the time when the insurance was effected. The nurse who attended Mrs. Formby at her last confinement spoke to the laceration, and how she attended to it. Also a nurse from St. Mary's Hospital, who assisted at the operation. Mrs. Bisshopp, a friend, deposed to Mrs. Formby looking very ill in the summer of 1870, and complaining of weakness ever since her confinement, and did not know that she would ever be well again; she had hysterics and a constant discharge. A Mrs. Legh, a relative, swore to having been constantly told of the same things by Mrs. Formby in her letters. Mrs. Shuttleworth, her aunt, was a very important witness, stating that she corresponded with Mrs. Formby after her last confinement, and that the latter always complained of languor and general debility, and that she was generally out of health, and especially had difficulty in walking and standing.

No explanation was offered as to the late Mr. Kempe's silence as to the laceration, but it was hoped that he had forgotten the circumstance, or thought that it had healed. The two persons who had acted as referees confessed to knowing very little of Mrs. Formby.

Dr. Barclay, Dr. Risdon Bennett, Mr. John Birkett, and Mr. John Wood were examined as scientific witnesses, giving it as their opinion that the laceration, falling of the womb, and attendant discharges, would probably have been attended by the symptoms which Mrs. Formby spoke of in her letters, and which she ought to have revealed to the office. They believed that death was due to bursting of an abscess into the peritoneum, or pyæmia; the latter, they said, was not common after such an operation as had been undergone, but might occur after the slightest wound. From the description of these witnesses Mrs. Formby appeared to be a dark woman, stout, and good-looking, at first sight presenting the appearance of health, but some witnesses said she was fat and flabby, of sedentary habits, soon tired on exertion, nervous and excitable, but ate and drank well—her maid said inordinately.

The case for the plaintiff was that Mrs. Formby was substantially in good health; that the laceration was of the most trifling character, and gave her no inconvenience, and was unknown to her; that the discharges were simply leucorrhœa; that the ailments voluntarily spoken of by her in the letters to her friends denoted merely a temperament very commonly found in women, in which a pleasure is found in detailing all their feelings and little ailments. That the laceration was slight; there was no need of the operation, which was done at Mrs. Formby's request when she understood its nature; that she perfectly recovered from it, and was about to leave Dr. Tyler Smith's care when an abscess appeared totally unconnected with the operation, which speedily carried her off.

Dr. Lyle was called, and spoke of his engagement with Mrs. Formby, his utter ignorance of there being anything the matter with her until some weeks after the insurance, when, finding the leucorrhœa continue for which he had previously treated her, he sent her to London for advice, she first going to Dr. West, then to Dr. Graily Hewitt, and finally to Dr. Tyler Smith. Other witnesses were called, who spoke generally as to her good health, but great discrepancies existed as to her walking powers, some saying she walked well, and others, on cross-examination, that she walked slowly and was very soon fatigued.

Dr. West only saw her once, and did not thoroughly examine her.

Dr. Graily Hewitt spoke of the laceration as slight, but that she had anteversion of the uterus with some enlargement, and ordered her a cradle pessary. She remained under his care some weeks. The witness knew nothing of ulceration and purulent discharge, but that the patient was very much out of health.

Dr. Tyler Smith then gave his evidence, stating that he found Mrs. Formby suffering from purulent discharge, prolapsus, and ulceration of the womb. He removed a pessary which he acknowledged he had no favour for, and implied, on being pressed, that it might have had something to do with the ulceration and discharge. He found also a laceration of the perineum. (Various accounts were given of this laceration. It did not pass through the sphincter ani, but reached to within about a quarter of an inch of it.) By medicines and injections he cured the discharge and ulceration, and then proposed the operation for mending the perineum. This was done at the end of the year 1870. The wound soon healed, and at the end of three weeks Mrs. Formby came down into the drawing-room to dinner. In a day or two, however, she became very ill, had rigors, and took to her bed. In the course of a week or two it was found that an inflammatory process was going on amongst the pelvic organs, and, finally, an abscess was felt which burst into the rectum. Again a collection of matter was formed, which Dr. Tyler Smith believed burst into the peritoneum, as she one day suddenly became worse with symptoms which denoted such an occurrence. Death took place about two months after the operation. He asserted again most positively that Mrs. Formby was well of the operation, and that he was about to send her to Seaford; that she got out of bed one night during a menstrual period, took cold, and this was the origin of the abscess. He therefore had no need to mention the operation in the certificate of death.

Dr. Barnes was called in and saw her once during the fatal illness. He believed she then had peritonitis and pelvic inflammation. He assented to Dr. Tyler Smith's opinion, that it might have come on from cold, as the wound had healed and the patient was convalescent.

The judge, Baron Bramwell, then summed up, reviewing the whole of the evidence with great care, and finally left three questions to the jury—1. Was there any misrepresentation? 2. Was there any material misrepresentation? 3. If any, was the policy procured by it?

The jury returned affirmative answers to all three of these questions, and a verdict was accordingly found for the defendants.

THE CAMP IN THE PUNJAB.

THE troops gathered together from various parts of India to form the second camp of exercise represent a large force. The climate of the site selected for the encampment is good, and the weather is described as bracing and as having had a beneficial effect on the health of the men composing the force. Lord Napier, by the latest accounts, had joined the camp, and the military manœuvres had commenced in good earnest. No epidemic disease was prevalent. The medical staff is composed as follows:—

Principal Medical Officer, Dr. G. S. Beatson, C.B., Inspector-General of Hospitals, British Service; Deputy Inspector-General of Division, Dr. T. Crawford, British Service, to 1st Division; Dr. T. Best, British Service, to 2nd Division; Dr. G. Bannister, Indian Service, to 3rd Division; Medical Charge of Field Hospital, European Troops, Surgeon W. R. Stuart, R.A.; Medical Charge of Field Hospital, Native Troops, Surgeon N. J. Grant, Indian Medical Department.

The general orders issued by the commander-in-chief in India not being readily accessible to medical officers in this country, we have thought it might prove interesting if we abstracted a few of the general rules issued for the hospital and conservancy requirements of the camps. The senior medical officer of each division is to be the sanitary officer, by whom the encampment is to be daily inspected. He is at once to report to the Quartermaster-General's Department any irregularity, and to furnish a weekly sanitary report to the principal medical officer. Two medical officers and one assistant apothecary to accompany each regiment of cavalry and infantry, with the addition of a native doctor for cavalry, and one medical officer to proceed with each battery of

artillery. The equipment of field hospital clothing and bedding taken into the camp by regiments is to be in the proportion of 3 per cent. of strength—that is what, under the established scale, is allowed for three men in hospital, as sufficient to have the bed linen and hospital clothing regularly changed. A general field hospital for British troops and another for native troops are directed to be established at Lawrencepoor, formed of the hospital establishments of different regiments marching to camp, but detached from them at this point. These hospitals are furnished to meet all ordinary requirements, and to them all serious cases of injury or sickness are to be transferred from the field. Each regiment and battery is to be provided with capital and pocket cases of instruments, a fair supply of splints and bandages, a small supply of useful medicines and articles of diet, such as essence of beef, brandy, &c. Should a man be seriously injured in the field, the medical officer in attendance on him is to write a few lines in pencil as to the particulars of the injury, and send him back to camp, where steps will be taken to detain him or send him on to the hospital in rear at Lawrencepoor. A medical officer is always to be present with each regiment and battery in the field, and one medical officer is always to be on duty in each brigade. A field hospital tent is to be supplied for every brigade. A certain proportion of doolies and doolie-bearers and ambulance-carts are to accompany and be attached to the various brigades of British troops. The arrangements for camp conservancy and water-supply seem to be good. As regards the latter, the efficient protection of the water-supply from waste and pollution is to be arranged for by officers commanding brigades, sanitary police, and sentries being employed for that purpose. A liberal allowance of Macnamara's and other filters is to be issued.

Correspondence.

"Audi alteram partem."

THE CONTAGIOUS DISEASES ACTS.

To the Editor of THE LANCET.

SIR,—I am glad to see that the observations which Mr. H. Lee made in his Lettsomian Lectures on the subject of vaginal discharges in women, as bearing on the Contagious Diseases Acts, have been published in your journal. Those observations had previously attracted my attention, and, as coming from so high an authority, they will doubtless receive the attention of all who are interested in the subject. It will, therefore, be useful, in order to elucidate the question, if Mr. Lee would state a little more fully how he thinks that the admitted difficulty of distinguishing the venereal from the non-venereal discharges in women bears upon the question of the Contagious Diseases Acts. It must be remembered that every woman subjected to these Acts is proved, either by her own admission or by testimony given before a magistrate, to be a public prostitute, before she is liable to any medical examination whatever; and that for the whole time during which she is submitted to periodical examination she is in the daily habit of promiscuous sexual intercourse. Admitting to the fullest extent which can be demanded by any reasonable person that cases of vaginal discharges occur in which it is very difficult to decide whether they are venereal or no, I would ask how this bears on the question whether it is desirable in the case of a known prostitute to seclude her and cure her of such discharge (whether venereal or no) before she can again indulge in promiscuous intercourse? Would Mr. Lee deny that what he says about men is true also about women? "Most of these discharges may be communicated in kind. A pus-globule, from whatever source derived, will grow, subdivide, and multiply for a time when translated to another part, and may there produce an action of the same nature as that which originally produced it. Some of these actions have a specific character." If it is true that many of these discharges are specific, and almost all are communicable, what does it matter for the purposes of the Contagious Diseases Acts whether they are what we technically call venereal or no? This was a question which was, I need hardly say, fully debated before the Contagious Diseases Acts Commission, of which I was a member. Some accidental circumstance deprived us of the advantage of hearing Mr. Lee's opinions, at that time, from his own mouth, but we endeavoured to give as much weight as we thought it deserved to the difficulty of diagnosis above referred to. On mature reflection it appeared to those of the Commissioners who were in favour of the principle of the Acts, that this difficulty had no bearing on that principle, since if it is justifiable to seclude a prostitute who is diseased, the occasional difficulty of diagnosing the disease ought not to stand as an objection to using the only means by which the diagnosis can be established. And, as a matter of detail and practice, it was thought that to exclude a public woman so long as she is suffering from a purulent discharge is an indubitable benefit to herself and to those with whom she would otherwise have connexion; while the opposite course of allowing the dubious cases to go free would, no doubt, turn loose on the town a proportion, hitherto indeterminable, but, I believe, very considerable, of cases of specific venereal disease. If I am mistaken in these ideas I shall be very thankful to my respected colleague for correction, but I think anyone who will read his essay on Gonorrhœa in "A System of Surgery" (second edition, vol. 5), and meditate especially on that passage (on p. 186) in which he dwells on the liability of any purulent fluid furnished by the female generative organs to excite gonorrhœa in the male, and on the probability that such purulent discharge may also convey syphilis if the woman be constitutionally syphilitic, will agree with me that I have respectable authority for them.

I am, Sir, yours, &c.,

Clarges-street, Feb. 8th, 1873. T. HOLMES.

THE LATE DEATH UNDER NITROUS OXIDE.

To the Editor of THE LANCET.

SIR,—I think you will agree with me that inferences drawn from inaccurate data are usually erroneous, and I believe you will allow that the conclusions arrived at by the writer of the annotation in THE LANCET of Feb. 1st on the recent death following the administration of nitrous oxide, must be included in this category, for the particulars themselves in the newspaper report on which he founds his reasoning are incorrect. The weight of any statement bearing your authority is so great that these erroneous conclusions will be hereafter quoted as sound ones if they remain unchallenged; and I trust you will permit me to explain in what particulars they err. In the first place, the writer says: "These facts clearly show that the assertion, so constantly made, that nitrous oxide does not affect the heart, is without foundation, for the first symptom presented by Miss Wyndham under the influence of the gas was rapidity of pulse with diminution of volume." What Dr. Pattinson really does say is, and I quote from the report drawn up by him in conjunction with Dr. Drake and Mr. Browne Mason, "that the pulse became less rapid, but that its volume did not vary." And this testimony agrees with and support the conclusions formed by the committee, of which I had the honour of being a member, appointed to investigate the action of nitrous oxide, and does not in any way bear out the suggestion of your annotation.

Again, the writer says: "The immediate cause of death was clearly paralysis of respiration. There was no obstruction to the air-passages, and the tongue was protruded from the mouth while she still respired." This statement also is not borne out by fact, for there was considerable enlargement of both tonsils, with chronic elongation of the uvula interfering with her breathing, and rendering it at times somewhat loud, and that sort of breathing which may be explained by the term "snorting." And we find a little further on in Dr. Pattinson's report: "The symptoms now became alarming, the features appeared puffy and swollen, the eyeballs protruding, and the breathing thick and stertorous." Surely, Sir, this account does not resemble the effect of paralysis of respiratory muscles. In all the animals that I have seen killed with nitrous oxide the breathing has been quiet, more and more shallow, then intermitting, with the intervals longer and longer till death ensued. In this unfortunate case, Dr. Pattinson gives it as his opinion,

"that after the gag was removed" no more air entered the chest; and both he and Dr. Drake agree that, when artificial respiration was attempted, the breathing sounds produced were only respiratory ones, and that there was no entrance of any air whatever. Now, had there been complete paralysis of respiration, it would not have prevented the entrance of air into the chest when the thorax was raised, as on the Silvester method.

That nitrous oxide is not safe in inexperienced hands, I admit; but when given by a skilled administrator, I believe it to be the safest anæsthetic in use, and I feel quite sure that this patient did not die from the effects of the gas.

There are some other inaccuracies which I pass over.

I am, Sir, yours faithfully,

F. WOODHOUSE BRAINE, F.R.C.S.

Maddox-street, W., February, 1873.

Report of the late Fatal Operation under Nitrous Oxide Gas. By Mr. BROWNE MASON. (*Read before the Odontological Society.*)

THINKING that the members of the Odontological Society of Great Britain will like to hear full particulars of the late fatal case following the administration of nitrous-oxide gas that has occurred in my practice, I forward the subjoined report, prepared in conjunction with Drs. Drake and Pattinson, which my kind friend Mr. Braine has promised to read for me in my unavoidable absence; and I should like to take this opportunity of thanking the large number of my brother practitioners who have so kindly expressed their sympathy with me under the peculiarly trying and painful circumstances in which I have been placed.

On the 22nd of January, a lady, then residing at Seaton, near Axminster, Devon, came to consult me about the removal of an upper second molar, on the left side of the mouth. The patient was thirty-eight years of age, had generally enjoyed good health, and there was no reason for believing that any thoracic disease existed. She was of middle height, stout, with a peculiar cast of countenance, having prominent eyes, a very flat superior maxillary arch, the lower maxilla being very underhung. The nasal arch was somewhat flattened, and this, together with her having chronic elongation of the uvula, and considerable enlargement of both tonsils, interfered slightly with her breathing, rendering it at times somewhat loud—that sort of breathing which may be expressed by the term "snorting," particularly after much exertion, such as going up stairs. On the day in question she was unusually well and in good spirits. On inspecting her mouth, I found considerable disorder in the arrangement of the teeth. On the left side of the upper jaw the second bicuspid was situated with what should have been its posterior surface in juxtaposition with, and against the lingual surface of, the second molar, which was the tooth to be extracted. This tooth had been the subject of so much caries that a probe could be passed right through from the anterior to the posterior surface. The pulp was gone, and there was excessive periosteal inflammation. The bicuspid being quite sound, I was desirous of saving it, expecting that in time, after the removal of the molar, it would drop into the dental arch and become useful. It was not possible to remove the tooth with the ordinary forceps without disturbing the bicuspid; so I decided on cutting off the crown of the diseased tooth with the excising forceps, then separating the fangs, and removing them singly.

The patient, who had never taken gas before, being accompanied by her brother-in-law, Dr. Pattinson, who was also her medical attendant, desiring to be placed under the influence of gas, was seated in a Morrison's chair, which was inclined backwards, the face being turned somewhat up, to enable the upper teeth to be conveniently reached, and I proceeded to administer it in my usual manner, as follows:—Having ascertained that the patient had perfect freedom for breathing, the dress being open at the neck and throat, and quite loose elsewhere, I filled a gasholder of six-gallon capacity from one of Ash's fifty gallon iron bottles containing liquid gas. I used the ordinary face-piece usually supplied with the apparatus, but without the supplemental bag; the gag used on the occasion (an ordinary wooden one) is now shown you, and was inserted between the first molar and the second bicuspid in both jaws on the right side of the mouth, and well locked by the cusps of those teeth. I gave Dr. Pattinson charge of the pulse at the left wrist. After the patient had taken some half-dozen respirations, he exclaimed that the pulse was not so rapid, but he states that its volume did not vary. I removed the face-piece, saying, "Let us do without it"; and accordingly cut off the crown of the tooth with the excising forceps, which of course did not hurt the patient, as the pulp was gone; but on my thrusting this spear-pointed instrument into the exposed pulp cavity, and with a twist splitting the fangs, so much pain was produced, owing to previous inflammation of the periosteum of the fangs, that the patient declared she could not bear any further operation unless more gas was given her. On rinsing out the mouth, the water was returned tinged with blood. An interval of ten minutes took place, during which the patient was somewhat hysterical; and the bleeding having quite ceased, the same gag was replaced in its former position, and the inhalation resumed. Dr. Pattinson cannot agree that the bleeding had *quite* ceased—it was never other than slight—but he thinks there must have been a minute quantity of blood exuding from the gum during the second inhalation. At Dr. Pattinson's request I now took charge of the pulse at the right wrist, while he held that at the left. The patient took the gas well, but just before quite losing consciousness she raised her right hand and pushed off the inhaler, which I replaced and continued the inhalation. Dr. Pattinson states it as his impression that no more gas was given after the inhaler was pushed away, the eyes never having closed. I noticed that the pupil of the right eye was slightly dilated, and on touching the conjunctiva reflex action took place, showing that this membrane was not completely insensible. On removing the inhaler I am quite certain no blueness existed, and finding the stumps exposed and uncovered with blood, I proceeded to operate, and attempted to seize the palatine fang with a pair of stump forceps, but, the edge giving way, I dislodged it with an elevator, with which I afterwards easily removed the outer fangs, the whole operation lasting about three-quarters of a minute. I received all the fragments of tooth in my fingers, and feel quite sure nothing passed backwards into the throat. I then saw for the first time blueness of the lips, but Dr. Pattinson had noticed that during the operation the ear on his side was bluish, and on looking at the face saw blueness there also; but he says he did not mention it, as he had heard of this discoloration occurring at gas administrations. The symptoms now became alarming; the features appeared puffy and swollen, the eyeballs protruding, the breathing thick and stertorous, the point of the tongue thrust between the teeth, but no convulsive movements were visible. The pulse and the appearance of the pupils at this period were not observed, attention being paid to more urgent matters. An old attendant, who was in the room, exclaimed, "Take out the gag; she is choking!" This was the first suspicion Dr. Pattinson had that anything was going wrong. The gag was then forcibly removed; it needed great force to separate the jaws, and possibly it was then chipped as you now see it, for it was perfect when inserted and exactly where I placed it at first. Mr. Braine, on examining the gag ten days after the operation, pointed out to me the broken surface, which I had not seen before; but never having looked at it since, the piece may have been broken accidentally after its use on this occasion. I then thrust the head forward to see that no blood got into the throat, and passed my finger down over the tongue to draw it forward, as it had now dropped back. From this time Dr. Pattinson thinks there was fixity of expression, and no further entrance of air into the chest. The window was thrown open, and the face dashed with cold water. I now left the patient in Dr. Pattinson's hands, to fetch further assistance. Whilst I was absent he continued his endeavours, and applied strong ammonia to the nostrils; there appeared to him to be some sensibility, inasmuch as she seemed to recoil slightly from the pungency of the ammonia. He then noticed about a tablespoonful of water lying at the back of the mouth, which had lodged there during the time he was dashing it over the face, and he drew the head forwards to allow it to run out. After an absence of about three minutes I returned with Dr. Drake, for years past one of the most eminent physicians of the city, and at the present time consulting physician to the Devon and Exeter Hospital. At this time the pulse was felt in both radials, and in the left carotid. I substituted

the handle of the forceps now exhibited for my finger to keep the tongue forward, for the purpose of allowing freer access of air, and Dr. Drake performed artificial respiration, by alternately pressing on the thorax and then allowing it to expand by its own elasticity, at the same time raising the arms, and this was continued until the pulse ceased, but the breathing sounds produced were only those of expiration. When Dr. Drake came into the room he found the patient in the position which has been described. Her countenance was dusky, face swollen, eyes projecting, tongue in the mouth, mouth open. He put his finger as far as he could into the throat, to find that nothing interfered with the access of air. She made three or four faint expiratory movements, accompanied by a slight sound. During this time the pulse beat regularly, and continued to do so nearly two minutes after all respiratory movements had ceased. The blueness about this time began to disappear. All our efforts were unavailing, the pulse ceased to beat, and death ensued. Two hours and a quarter after death the blueness had entirely disappeared.

It is much to be regretted that a post-mortem examination was not permitted, as it would doubtless have cleared up many points which must now ever remain in obscurity.

Dr. DRAKE said it was quite impossible for him, seeing her in a dying state a few moments only before death, to form any positive and precise inference as to the immediate cause of death, but his impression was as stated by him at the inquest.

THE VALUE OF EVIDENCE IN CASES OF DOUBTFUL IDENTITY.

To the Editor of THE LANCET.

SIR,—In a conversation which I had a short time since with my learned friend the coroner, Mr. Bedford, I submitted to him the following question:—"Supposing a witness (A) gave evidence that he recognised in a prisoner such strong resemblance to a criminal as to justify him in swearing to the identity, while a witness (B) gave evidence that, allowing the resemblance was strong, he saw differences which justified as positive a declaration that the prisoner was not the guilty person, what value would you attach to the evidence of A and B?" "I would attach much greater value," said Mr. Bedford, "from my experience in such cases, to the evidence of B. I should hesitate even if five witnesses were opposed to B." "Would you," I asked, "if the number were increased to ten or twenty?" "Yes, even to twenty," Mr. Bedford replied. In one of the daily papers it was remarked, in the case of Dr. Hessel, that although there was a very small minority in favour of Dr. Hessel's innocence, it was curious to observe that the minority proved correct. A close examination of this question will lead to a conclusion of some importance in such cases as those referred to.

The evidence which rests alone on resemblance will be seen to have a very much less value than that founded on differences, for the latter supposes not only a knowledge of points of resemblance, but such an accurate perception as to enable the witness to discern differences; that is to say, one witness is much less reliable than the other. On referring to some of the trials during the late disturbances in Paris, singular examples of this fact were brought out, and as the subject has not yet received the attention it deserves, I beg to submit it to the careful consideration of those who are called upon to decide in these difficult cases.

Not long since, two children were brought to me as patients by their mother, at the Hospital for Sick Children, who were twins of about seven years of age, and were so much alike in all respects that I put the question to the mother how she distinguished them. She was not able to say how she did so, but appeared to be amused at my conceiving that there could be any difficulty. From this I am inclined to think that it is hardly fair to demand of a witness the reasons of his opinion—that is, a distinct statement of the means by which he distinguishes the accused from the real criminal; and though a witness could easily indicate the points of resemblance, it becomes quite another question when he is examined as to points of difference. To enter into the explanation of the singular power by which we discern between one person and another would require greater patience than could be justly expected from your readers.

I am, Sir, your obedient servant,

R. J. LEE,
Lecturer on Forensic Medicine at the Westminster Hospital School of Medicine.

February, 1873.

"THE TWENTIETH EXAMINING BODY."

To the Editor of THE LANCET.

SIR,—I am glad to see you remark once more on the grotesque parody on examining boards just started by the Obstetrical Society. I need not point out the many serious objections to this twentieth board, for you have already done so, and the *coup de grâce* has emanated from the examiners themselves. Let your readers turn to page 112 of THE LANCET for January 18th and reread the questions. Numbers 1 and 3 are well enough, but surely it does not rest with a midwife, as suggested in No. 3, to diagnose placenta prævia during the latter months of pregnancy? If the sign for suspicion—hæmorrhage—should present itself, even a midwife certificated by the Obstetrical Society should call in competent aid at once, and not fritter away valuable time in discussing to herself such probabilities. No. 4 I shall quote, for it shows what this hybrid system will lead to. "How would you advise the bringing up of a child (1) when partly (2) when wholly deprived of its mother's milk?" Here is a direct encouragement for these half-trained women to do exactly what we all know they are already too prone to, dabble in children's diseases. Let us have trained midwives by all means, but let their certification be undertaken by a body to whom they may be made responsible, as we are, for their after-conduct. If the Obstetrical Society gives a woman a diploma it has no further power over her; and although the paper is quite worthless, yet the public will not think so. In this way the members of the Obstetrical Society are directly infringing one of the great principles of all our medical corporations, that by which the members of each are liable to punishment at any time for misconduct.

I am, Sir, your obedient servant,

F.R.C.S.

"DANGERS AND DISABILITIES OF LICENTIATES OF THE COLLEGE OF PHYSICIANS, EDINBURGH."

To the Editor of THE LANCET.

SIR,—Those whose business calls them frequently to our county courts are aware that similar cases to those you refer to, under the above heading, in your last week's columns, are by no means of rare occurrence. I know of three such cases myself where plaintiffs were nonsuited because the defence raised was that they did not hold the Apothecaries' licence. The judges, when defendants raise the question, seem to rule that, as no part of the Apothecaries' Act has been repealed by the Medical Act, the whole of it is still in force, and that the effect of registration is merely to render it legal for medical men to practise and hold medical appointments according to the nature of their qualifications, the respective value and privileges of which are just the same, and only just the same, as they were before the passing of the Medical Act of 1858. And our law text-books of even recent date teach that, without the Apothecaries' licence medical practitioners cannot recover their charges in a court of law for medicines supplied in medical cases.

As regards the value of correct registration, it may be worth mentioning that I know of one case where a gentleman, holding the Apothecaries' licence, removed from one part of London to another, and because his new address was not in the Medical Register of the time being, the judge refused to let him proceed with his case until he was satisfied that the fresh address had been properly registered.

I am, Sir, your obedient servant,

February 4th, 1873. A DEBT COLLECTOR.

PARIS.

(From our own Correspondent.)

THE question of the establishment of medical stations for the night, where urgent cases would be sure to get medical help, is again being agitated here. The subject had already excited public attention before the war, in connexion with some cases which terminated fatally before medical assistance could be got. Various plans have been suggested. One of them is very comprehensive, and consists of a system of hanging lanterns of various colours at the doors, not only of medical men and pharmaciens, but also of notaries and various other magistrates. This might certainly be very useful, but it seems too radical a reform to be soon adopted. The same remarks apply to another scheme, which involves the creation of a day and night sanitary service, regularly administered, with a hierarchy of medical men and inspectors. It is very likely that the project sent in by Dr. Passant, and which seems a very practical and sensible one, will be finally adopted. It obviates one of the difficulties which prevented medical aid from being readily got at night—namely, the fear that the practitioner who was woke up in the middle of the night might, besides the trouble, fatigue, and liability to catch a cold, just run the risk of being robbed or assaulted, and get no payment for the excursion. According to Dr. Passant's plan, the names of such medical men as are willing to undertake nightwork are to be inscribed at the police stations of their respective quarters of residence. The patient's friend must go to the police-station and there ask for a doctor. An agent takes him to the medical man, accompanies the doctor on his visit and back home, and before quitting him gives a fee of eight shillings. The town of Paris or the Caisse de l'Assistance Publique provides the money for the fees, and necessarily makes the patient pay; so that with this scheme the doctor would be sure to be paid for his trouble, and the urgent case would be sure to meet with assistance.

The recent changeable and cold weather which we have had here has exerted its well-known influence not only on the chest and air-passages of the *vulgum pecus*, but also of several celebrated personages, amongst whom may be mentioned the chief of the Radical party, Gambetta, who, on account of a rather bad bronchitis, has not been able to assist at the last stormy debates of the Assembly. Two of the Ministers, Admiral Pothuan and M. de Rémusat, have also been ill during the last fortnight, the former from laryngitis, and the latter from congestion of the lungs; both have now resumed their duties.

At one of the recent meetings of the Academy of Medicine, Dr. Piorry, the famous advocate and promoter of percussion as a means of diagnosis, referring to the Emperor's illness, stated that he purposed to demonstrate at some future meeting that, had plessimetrism been employed, so as to make out the condition of the kidneys, the Emperor's death would probably not have taken place.

Mentioning the Academy reminds me that I have not yet noticed the death of the celebrated Dubois d'Amiens, who during so many years was the perpetual secretary to that institution, and made himself famous by the remarkable discourses which he used to deliver and the extraordinary authority which he enjoyed at the Academy.

The worthy Dean of the Faculty entertains the hope that at length the attention of Government will be given to the need of speedily rebuilding some other edifice for the School, or at least of enlarging the present one. Quite recently several of the medical members of the National Assembly paid a visit to the School, and, under the guidance of Professor Wurtz, were able to state *de visu* that accommodation is wanted for the purposes of teaching, and the establishment of proper laboratories.

The reports sent in by the health inspectors having stated that in various quarters of the town (the out-of-the-way ones) the police laws in respect of salubrity are not observed, handbills have been posted at the various *mairies* to direct the attention of the inhabitants to the strict observance of the health regulations.

Paris, Feb. 4th, 1873.

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Feb. 6th:—

Lowne, Benjamin Thompson, Colville-gardens.
Burton, John Randell, Lee-park.
Morton, Albert Samuel, Louth, Lincolnshire.

As Assistants in Compounding and Dispensing Medicines:—

Bradshaw, John, Winsford, Cheshire.
Stewart, Edward Hinton, Devizes.

The following gentlemen also on the same day passed their Primary Professional Examination:—

Robert Goldsworthy Tucker, St. Bartholomew's Hospital; James Benjamin Kelly White, London Hospital.

NAVAL MEDICAL SERVICE.—The following candidates were successful at the competitive examinations held at London in Aug. 1872, and at Netley in Feb. 1873, after having passed through a course at the Army Medical School, Netley, and will receive Commissions in H.M. Navy:—

	Marks.
Sparrow, T. F., Dublin	4337
Boland, W. H., Dublin	4185
O'Keefe, J. L., Dublin	4106
O'Neill, J., Cork	4103
Spencer, W. F., Dublin	3921
Williams, R. W., Glasgow	3872
O'Donnell, T. A., Dublin	3783
Allen, J. H. L., Dublin	3665
Queely, A. C., Dublin	3487
Browne, O. P., Dublin	3467
Thompson, E. C., Dublin	3359
Adams, A., Dublin	3333
Loftie, F. R. H., Dublin	3290
Thornhill, H., Dublin	3145
Gibson, G., Dublin and Edinburgh ...	3020
Smith, G. W., Aberdeen	2966
Scott, J. W., London	2949
Kelly, A. H., Dublin	2788
Ferguson, W. C., Dublin	1628

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Professor W. H. Flower, F.R.S., F.R.C.S., will commence his course of eighteen lectures on the "Osteology and Dentition of Extinct Mammalia, with their Geological and Geographical Distribution and Relation to Existing Forms," on Monday next, at 4 o'clock P.M. The lectures will be illustrated as fully as possible by specimens from the Museum and by diagrams.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Amongst the operations expected to be performed at the above hospital on the 15th inst. is that of gastrotomy for supposed extra-uterine pregnancy.

ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—The next meeting of this Association will be held on Saturday, February 15th, at 7.30 P.M., when Dr. C. Meymott Tidy will read a paper entitled "Vitiated Air."

MR. JOHN BLUETT, medical officer and public vaccinator for the workhouse and district of Chesterfield, has been awarded the sum of £33 7*s.* by the Government for successful vaccination.

CHARING-CROSS HOSPITAL.—The fifty-second annual meeting of the governors and supporters of the above institution was held this week at the Board-room of the hospital; Mr. H. Bosanquet, the treasurer, in the chair. The report showed that during the past year 1362 in-patients and 15,928 out-patients had been under treatment, including 5502 cases of accident and emergency. Of this number 3977 were received with letters of recommendation and 13,316 without. The daily average of in-patients was 116. The average cost of each bed, constantly occupied, for the year had been £89 13*s.* 10*d.*, as against £56 12*s.* 4*d.* in 1871. The report then referred in terms of approval to the Hospital Sunday movement, thanked the Lady Superior and Sisters of St. John's House for their valuable services as nurses in the hospital, and expressed an opinion that the out-patient system was not abused to the extent that had been publicly alleged. The legacies received during the year amounted to £4594, and included £2000 from Mr. F. Oak and £1000 from Miss Forster. The total income for the year from all sources had been £9934 18*s.*, and the expenditure £8101 17*s.* 6*d.*, being £700 more than in 1871. The invested fund was £20,000.

THE annual meeting of the Belfast Branch of the Royal Medical Benevolent Fund Society of Ireland was held on Wednesday, the 5th inst., at Belfast, under the presidency of Dr. T. H. Purdon. According to the financial statement of the past year, it appeared that the total sum transmitted to the parent society was £113 13s. 9d., of which amount the subscriptions were £63 13s. 9d., and the donations £50; the difference in the disposal of the sums being that, while the donations are placed out at interest, the subscriptions are applied to the immediate purposes of the Society.

ROYAL NATIONAL HOSPITAL FOR CONSUMPTION, VENTNOR.—The fourth Annual Court of Governors of this institution was held on Wednesday, at the Cannon-street Hotel, under the presidency of the Right Hon. Viscount Eversley. Three blocks of houses are now open and occupied, a fourth block is being built and furnished entirely by Sir W. Martin, while a gentleman had undertaken to erect one of the two houses for the fifth block. During the year 106 men and 53 women patients had been received in the six houses open, the patients remaining from two to six months each. The benefits have also been extended to 18 out-patients. Of the 159 in-patients 38 left in improved health, 37 much improved, 26 very greatly improved, and 9 restored to health. Only six patients had died during the year. The only endowment yet possessed by the hospital is a sum of £3000. A special fund of £2500 is being raised for the furnishing and maintaining the houses that are being erected, about one-half of which has been subscribed, including £105 from the Mercers' Company, £100 from the Grocers' Company, and £100 from Sir Lawrence Peel. The total income for the year, including balance £811, donations £2162, special donations for fourth and fifth blocks £4300, had been £10 026 14s. 4d. The ordinary expenditure had been £5200, and, after adding the extraordinary expenditure, there remained a balance on the year of £887.

BEQUESTS, ETC., TO MEDICAL CHARITIES.—Mr. James Hatton, of Higher Broughton, has given £5000 to the Manchester Royal Infirmary. Sir Henry de Hoghton has given £500 to the Endowment Fund of the Preston Infirmary. Mr. James Startin, of Savile-row, bequeathed £1000 to the Hospital for Diseases of the Skin, Stamford-street. Miss Elizabeth Houston Douglas, of Eaton-place, bequeathed £250 each to the Hospital for Consumption, Brompton; the Convalescent Asylum, Walton-on-Thames; the Cancer Hospital, Brompton; St. George's Hospital; the Royal Hospital for Incurables, Putney; the British Home for Incurables, Clapham Rise; and the Idiot Asylum, Earlswood. Mr. E. Benn, of Ballymena, has given £1000 to aid in the erection of the Convalescent Home in connexion with the Frederick-street General Hospital, Belfast. On Tuesday last the St. Peter's Hospital for Stone, Berners-street, received an anonymous donation of £10,000, in ten notes of £1000 each.

Medical Appointments.

ACKLAND, W. H., M.D., to be Medical Officer of Health for the Bideford Urban Sanitary District.

ANDERSON, E. J., M.D., M.R.C.S.E., to be Medical Officer for the Newry and Crobane Dispensary District of the Newry Union, Co. Down, vice Johnston, deceased.

BAYLIS, C. O., M.D., to be Medical Officer of Health for the Birkenhead Urban Sanitary District.

BERRY, W. T., M.D., to be Medical Officer of Health for the Bromley Urban Sanitary District, Kent.

BENNETT, R., M.D., to be Medical Officer of Health for the Buxton Urban Sanitary District.

BERESFORD, R. de la P., M.D., to be Medical Officer of Health for the Oswestry Rural Sanitary District.

BIRCH, E., L.S.A., to be Medical Registrar to King's College Hospital, vice T. C. Hayes, M.R.C.P., resigned.

BLAKEY, J., M.R.C.S.E., to be Medical Officer of Health for the Borough of Chesterfield.

BOTT, T. B., M.D., to be Medical Officer of Health for the Bury Urban Sanitary District, Lancashire.

BROMFIELD, J., M.R.C.S.E., to be Medical Officer of Health for the Urban Sanitary District, Whitchurch, Salop.

BUCKNY, R. G., L.R.C.S.I., to be Medical Officer of Health for the Bulwell Urban Sanitary District.

BURCHELL, J. C., L.R.C.P.Ed., L.F.P. & S. Glas., to be Medical Officer and Public Vaccinator for the Northern District No. 2 and the Workhouse of the Wellington Union, Salop, vice Hayes, deceased.

BURGESS, E. A., M.R.C.S.E., to be Senior Surgeon in the Peruvian Navy.

COLE, G., M.R.C.S.E., to be Medical Officer of Health for the Ely Urban Sanitary District.

DANIEL, J., L.R.C.P.Ed., L.R.C.S.Ed., to be Assistant-Surgeon to the Leith Hospital, vice T. H. Ford, L.R.C.P.Ed., L.R.C.S.Ed., appointed House-Surgeon.

DANIEL, R. S., M.R.C.S.E., to be Medical Officer of Health for the Oxton Urban Sanitary District.

DANIELL, G. W., M.R.C.S.E., to be Medical Officer of Health for the Blandford Forum Urban Sanitary District.

DE LISLE, F. I., L.R.C.P.Ed., to be a Medical Officer to St. Peter Port Hospital, Guernsey.

DRAKE, A., M.B., F.R.C.P.L., to be a Consulting Physician and an Honorary Governor of the Devon and Exeter Hospital, on resigning as Physician.

DRINKWATER, J. P., M.R.C.S.E., Medical Officer of the Llangollen Board of Health, to be Sanitary Medical Officer for the Western Rural District of the Corwen Union, North Wales.

DYER, H. G., M.R.C.S.E., L.R.C.P.Ed., L.M., to be Resident House-Surgeon to the Macclesfield Dispensary, vice J. F. Allwood, M.R.C.E., L.R.C.P.L., resigned.

EVANS, J. T., jun., M.D., L.R.C.P.L., to be Medical Officer to the Hertfordshire Gaol and the Herts Reformatory School, Hertford, and Medical Visitor of the Hadham Palace Asylum.

GAIRDNER, Dr. M. W., of Edinburgh University, to be House-Physician to the Hospital for Women, Soho-square, vice Dr. Harding, resigned in consequence of ill-health.

GAMBLE, C. E., M.R.C.S.E., to be Medical Officer for the Kiland District of the Halifax Union, vice Hamerton, deceased.

GILL, J., L.R.C.P.I., M.R.C.S.E., to be Medical Officer of Health for the Wem Rural Sanitary District: £100 per annum.

GODDARD, S., M.R.C.S.E., to be Medical Officer of Health for the Buralem Urban Sanitary District.

GREEN, G., M.D., to be Medical Officer of Health for the Hartlepool Urban Sanitary District.

HAMMOND, F. J., M.R.C.S.E., to be Medical Officer for the Fyfield District of the Andover Union, vice Bernard, resigned.

HEAD, E., M.B., M.R.C.P.L., to be a Consulting Physician to the Hospital for Women and Children, Vincent-square, Westminster, vice Aldis, deceased.

HEALY, J. K., L.K.Q.C.P.I., L.R.C.S.I., to be Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Cragaknock Dispensary District of the Kilrush Union, Co. Clare, vice T. Pegum, L.K.Q.C.P.I., L.R.C.S.I., resigned.

HIGHMORE, N. J., M.D., to be Medical Officer of Health for the Bradford-on-Avon Urban Sanitary District.

HUBB, J., L.R.C.P.Ed., to be Medical Officer of Health for District No. 6 of the Bedminster Rural Sanitary District.

JONSON, J., F.R.C.S.E., to be Medical Officer of Health for the Bishop Auckland Urban Sanitary District.

JONES, R. A., M.R.C.S.E., to be Medical Officer of Health for the Carnarvon Urban Sanitary District.

KENNIS, H. M., L.K.Q.C.P.I., M.R.C.S.E., to be Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Stillorgan Division of the Blackrock and Stillorgan Dispensary District of the Rathdown Union, vice R. W. Pendleton, L.K.Q.C.P.I., L.R.C.S.I., resigned.

KIRK, T. R., M.D., L.R.C.P.Ed., L.R.C.S.Ed., to be Medical Officer for the South District and the Workhouse, and Public Vaccinator for the Urban District of the United Parishes of Whittlesey, Cambridgeshire, vice C. N. M'Cann, M.R.C.S.E., deceased.

LLOYD, E. S., M.R.C.S.E., to be Medical Officer of Health for District No. 8 of the Bedminster Rural Sanitary District.

O'CONNOR, J. R. H., A.B., M.B., C.M., to be Resident Medical Officer for the Lock Wards of the Royal Portsmouth, Portsea, and Gosport Hospital, vice W. S. Deakin, M.R.C.S.E., resigned.

PAINE, H. J., M.D., to be Medical Officer of Health for the Cardiff Urban Sanitary District.

PEGUM, T., L.K.Q.C.P.I., L.R.C.S.I., to be Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Carrigaholt Dispensary District of the Kilrush Union, Co. Clare, vice Keogh, resigned.

PHELPS, W. H. G., M.D., to be Medical Officer of Health for the Burnham Urban Sanitary District.

PIZEY, G., M.R.C.S.E., to be Medical Officer of Health for District No. 9 of the Bedminster Rural Sanitary District.

ROE, J. W., M.D., to be Medical Officer of Health for the Ellesmere Rural Sanitary District.

ROGERS, W. R., M.D., M.R.C.P.I., to be a Consulting Physician to the Hospital for Women and Children, Vincent-square, Westminster, vice Tanner, deceased.

ROSE, W., M.R.C.S.E., to be Surgical Registrar to King's College Hospital, vice F. B. Roche, M.R.C.S.E., resigned.

SHAPTER, L., M.B., to be a Physician to the Devon and Exeter Hospital, vice Drake, resigned.

SHAW, J., M.D., M.C., to be Assistant Medical Officer to the Norfolk County Asylum, Thorpe, near Norwich, vice Dr. W. Taynton, resigned.

SIMPSON, J. H., M.R.C.P.L., to be Medical Officer of Health for the Castleford Urban Sanitary District.

STOKER, W., F.R.C.S.E., to be Medical Officer of Health for the Durham Urban Sanitary District.

THOMAS, B., L.R.C.P.Ed., to be Medical Officer of Health for the Llanelly Rural Sanitary District.

THOMPSON, A. B., L.R.C.P.Ed., M.R.C.S.E., to be Medical Officer to the United Law Clerks' Society, vice Stallard, resigned.

TUXFORD, A., M.D., to be Medical Officer of Health for the Boston Urban Sanitary District.

WADD, F. J., M.B., to be Medical Officer of Health for the Beaconsfield Urban Sanitary District, Bucks.

WALKER, J., M.R.C.S.E., to be Rural Sanitary Medical Officer for the Eastern Division of the Corwen Union.

WATSON, J., M.D., M.R.C.S.E., to be Medical Officer for District No. 5 and Public Vaccinator for the Ardwick District of the Chorlton Union.

WEATHERLEY, F., M.R.C.S.E., to be Medical Officer of Health for District No. 7 of the Bedminster Rural Sanitary District.

WEAVER, J., L.R.C.P.Ed., to be Medical Officer of Health for the Longton and Fenton Urban Sanitary Districts.

WILKINSON, W., L.R.C.P.Ed., to be Medical Officer to the Employés of the Imperial Gas-light and Coke Company, St. Pancras.

WINKFIELD, W. B., L.R.C.P.Ed., M.R.C.S.E., L.M., to be Medical Officer of Health for the Urban Sanitary District of Shirley, Southampton: salary £50 a year; population about 6000.

Births, Marriages, and Deaths.

BIRTHS.

CLARK.—On the 10th inst., at Cavendish-square, the wife of Andrew Clark, M.D., of a daughter.

JOLLYE.—On the 11th inst., at Donnington, Spalding, the wife of E. W. Jollye, M.R.C.S.E., of a son.

LYALL.—On the 31st ult., at Sea-view House, Leven, Fifeshire, the wife of Andrew Lyall, L.R.C.P.Ed., L.R.C.S.Ed., of a daughter.

PEARLESS.—On the 6th inst., at the Vicarage, Sevenoaks, the wife of Chas. D. Pearless, L.R.C.P.L., of a son.

PILKINGTON.—On the 2nd inst., at St. George's House, Chorley, the wife of W. Pilkington, L.R.C.P.Ed., of a son.

SMITH.—On the 8th inst., at Kensington-gate, the wife of Colwin Smith, M.D., Surgeon-Major Madras Army, of a daughter.

MARRIAGES.

BENJAFIELD—PYWELL.—On the 8th inst., at the Greek-street Chapel, Stockport, Harry Benjafield, M.B., to Amelia, eldest daughter of the Rev. J. Pywell, both of Stockport.

WILLIAMS—OWEN.—On the 6th ult., at the Parish Church, Windsor, Owen Williams, M.R.C.S.E., L.K.Q.C.P.I., to Agnes Amnie, only daughter of Joseph Owen, Esq., of Eton, Windsor.

DEATHS.

CHARLESWORTH.—On the 28th of Nov. last, at Benin, Upper Guinea, W. H. Charlesworth, L.R.C.S.I., aged 28.

ELLIOT.—On the 29th ult., John Elliot, F.R.C.S.E., of Kingsbridge, Devon, aged 65.

PAYNE.—On the 31st ult., G. B. Payne, M.D., of Charlwood-street, Warwick-square, aged 50.

RICHARDSON.—On the 7th inst., at Bedford-terrace, Plumstead-common, Dr. W. Richardson, late of the Royal Artillery, aged 68.

STEWART.—On the 4th inst., S. A. Stewart, L.R.C.P.Ed., of Manchester, aged 25.

WATKINS.—On the 2nd inst., D. R. Watkins, M.R.C.S.E., of Gellingham House, Carmarthen.

Notes, Short Comments, and Answers to Correspondents.

THE EPIDEMIC OF DENGUE FEVER IN INDIA.

THE *Indian Medical Gazette* for last month contains a Report of the Epidemic of Dengue in the Dacca District during 1872, by Dr. Wise, the Civil Surgeon of that station, which, besides giving a graphic description of the disease, touches on several points that we do not remember to have seen referred to elsewhere. The oldest native physicians in the city of Dacca do not recollect any previous outbreak of dengue fever, and existing records do not refer to any fever corresponding to it. Of the dissemination of the disease by human intercourse there can be no doubt. As regards the period of incubation, the few cases cited by Dr. Wise in illustration of this would indicate that, although variable, the incubationary period is short—one case being attacked thirty-four hours and another twenty-four hours after exposure to the infection. The susceptibility of different people varied very much. No class of the community was exempt; rich and poor, young and old, the idler and the labourer, all in turn were attacked. Dr. Wise calls attention to an interesting fact in the etiology of this disease—viz., the great liability of persons with surgical wounds to be attacked. In the southern wing of a hospital, exclusively occupied by surgical patients during the height of the epidemic, every patient was attacked with the disease in succession; while in the other wings not a case occurred. In this respect, as well as in the occurrence of a red-tipped, furred tongue, sore-throat, a rash that first appears in patches, but quickly spreads over the body, and in the subsequent rheumatic pains, and liability to abscesses, dengue fever has strong affinities to scarlatina; indeed it was, and by some is still, called "scarlatina rheumatica." The different range of temperature in dengue and scarlatina is not itself sufficient to disconnect the two diseases, and Dr. Wise apparently thinks the subject of their relation deserving of fuller inquiry. Dengue, in all its stages, is a very variable disease. Although the attack is often sudden, this is not the rule. Violent darting pains are felt in various parts—back, joints, limbs, and muscles,—not unlike the commencement of an attack of rheumatic fever. When the fever is fully developed, the patient is a picture of misery and helplessness, as no part of the body is free from pain. The temperature rises very early in the disease. It was 99·5° in one case three hours after the first sensation of pain; 103·5° in another after six hours; and in a native boatman it rose to 104·2° in four hours. Profuse perspirations occur; the eyes are suffused, the conjunctivæ of the lower lids are congested. Very little thirst seems, however, to attend these temperatures. We should be glad to ascertain whether the urine becomes albuminous after an attack of, or during convalescence from, dengue fever, and whether dropsy ever follows.

An Associate of King's College.—1. The work by Dr. G. Thomas, lately reviewed in our columns.—2. The manuals in our correspondent's possession will suffice.

E. A.—The qualifications do not confer the title in question.

BERLIN.

BY all accounts the capital of the North German Confederation must have lost rather than gained by its recently acquired importance. The rise in the price of living is such that students are leaving the University in great numbers, to the distinct advantage of Leipsic, whither all the deserters flock. "No professor," we are told, "cares for a call to Berlin." What he would leave behind is not at all compensated by the increase of income he would receive. So much has the cupidity of the richer classes been excited that they think of building nothing but palaces. No individual, and therefore no society, will throw away money on the philanthropic speculation of building houses in which the poor, respectable working man can reside with his family in comfort, health, and decency. The classes next above the artisan are scarcely better off. In 1871, of the 870,561 dwellings, as many as 93,423 had but one room capable of being heated. Matters get worse as time goes on; some half of the population now live in hovels or dens, which have generally two chalk lines crossing each other on the floor. In the one corner is the family bed; in the second the nursery; the third is let to a lodger; while the fourth is kitchen, sitting-room, and frequently place of business as well. There are positively not houses enough; and, in the words of an intelligent correspondent, "the Berlin Königsmauer bids fair to become a second St. Giles." The curse of gold has fallen on the city of the Hohenzollerns, and the indemnity is proving to Prussia pretty much the same Nemesis that the Eldorados of the New World were to Spain.

J. R., (Louth.)—Quantitative analysis is, we believe, required. Fresenius' Treatise (translated by Bullock) will be found a good guide to it.

"A CASE OF HERMAPHRODITISM."

To the Editor of THE LANCET.

SIR,—In perusing THE LANCET of the 23th ult. I notice a short paper with the above heading, by Dr. Hills.

To the physiologist and embryologist no subject presents more interest than the congenital malformations which occur in the genito-urinary organs. The fact that in the early stages of embryonic life the parts which, later, form these organs are identical or undistinguishable as to whether they be male or female, leads to many surmises as to the ultimate cause of sexual differentiation. It is, therefore, advisable when a case comes before us to make every effort to arrive at a complete diagnosis as to the formation, position, extent, &c., of every part of the malformed organs, to give drawings or photographs, and to be careful as to what expressions are used to indicate the parts in question. In not any of these particulars does Dr. Hills' paper agree, and I trust that in pointing out the weak parts he will consider this only in the light of a friendly criticism.

In the first place, the use of the term "hermaphroditism" seems to me objectionable, inasmuch as I do not recollect any case ever having been recorded. All cases in the museums and in reports resolve themselves into either epispadians or hypospadians, with a redundant growth of some particular portion of these organs. In the description of the "reproductive organs," Dr. Hills says: "No testicles exist in the labia or inguinal canals." Now, had testicles existed in the labia, it is certain that the labia in this case would have been a divided scrotum. It is to be regretted that from her struggles a more complete internal examination could not be made. Whether it would have been politic to have administered an anæsthetic is not in my province to say. An examination, however, per anum would have given the position and extent of the uterus, and probably of the ovaries. From the fact that in early life she had menstruated, a uterus is almost sure to exist; the uterine sound would, however, instantly set that question at rest.

There are some other points of great interest, and which could have been obtained by a cursory glance, which have not been noted at all. They are: whether she had a urethra, and its position; the existence or otherwise of the hymen; the condition of the labia minora; the size and measurements of the pelvis, at least externally; and whether the clitoris was perforate, or merely a hypertrophied growth. A photograph of the organs in question, instead of the face, would have been very desirable, because anyone acquainted with asylum inmates must have seen many cases in which the amount of hair was almost equal to that given.

I trust Dr. Hills at some future time will be able to give us fuller details of this interesting case. I am, Sir, yours faithfully,

St. George's Hospital, Feb. 10th, 1873. S. W. MOORE.

Eczema.—Our correspondent may try the effect of diuretics, followed by tonics, and in conjunction with the application of oil and careful bandaging, to prevent œdema; but we would advise him to consult some standard work which treats of the disease.

"COMPOUND DISLOCATION OF ANKLE."

THE writer of the paper on the above subject (J. J., a collier, aged forty) is requested to forward his name.

Mr. Henry Sewill's paper will, if possible, be inserted next week.

STONE IN THE HORSE.

To the Editor of THE LANCET.

SIR,—As any case of stone in the bladder may at the present time be interesting to your readers, permit me to chronicle a case of stone in a quadruped.

A case was brought under my notice the other day of a horse, aged sixteen years, which died exhibiting all the symptoms of stone in the bladder. A post-mortem examination was made, and twenty-seven stones were found in the bladder, varying in size from a medium-sized orange to a small walnut. There were strongly marked facets on all. I may observe, in conclusion, that the horse belonged to a miller, and during the last eight years had consumed a bushel of bran per diem.

I am, Sir, yours obediently,

T. H. COLMAN, M.R.C.S.E.

Toft Monks, near Norwich, Feb. 11th, 1873.

THE MEDICAL REGISTER.

THE fact of £12 10s. being received for the sale of Registers in 1872, as against £264 10s. 6d. in 1871, struck us as very remarkable. The facts seem to be as follows:—The private sale of the Register really is represented by the modest sum of £12 10s. But previous to last year the Government used to be buyers of the Register to the number of 2000 copies, for which they paid the Medical Council the sum of £250. Last year an arrangement was made by which the Queen's printer should print the Register, and charge the fifth of the entire cost to the Medical Council, which was £96 8s. 8d. The Council has in this way saved £220 0s. 2d. The whole edition numbered 2500 copies. It is to be desired that a shilling copy of the Register could be produced.

A Young Poor-law Medical Officer should consult the Medical Officer's Manual, by Lumley. Question 1 must be referred to the Local Government Board, as it is an entirely new one. In regard to pauper patients needing any particular nourishment, it is the duty of the medical officer to certify the same in writing, and cause the certificate to be delivered or sent to the relieving officer. The medical officer is not empowered to order such things, only to certify that they are necessary. The relieving officer or the guardians have power to deal with the certificate as they think fit, or to ask an explicit statement from the doctor of the grounds of his certificate. The responsibility of not acting in accordance with the certificate would rest with them.

Carl Hofferig.—Consult any physician. His fee will be a guinea.

INJURY TO THE SCROTUM.

To the Editor of THE LANCET.

SIR,—In the course of my practice a short time since a case came under my notice of such an interesting character that I feel it my duty to report it through the medium of your journal for the benefit of the profession, as it is but seldom one hears of a case of the kind with such a rapid and satisfactory cure.

A. B——, aged forty, a haulier, when engaged in his duty, and carelessly taking the reins, fell over upon his back, the horse at the time moving on, and had not a boy who was near seized the animal by the head, death would have been almost certain. The left wheel of the cart passed between the man's legs and thighs, and came directly in contact with the genital organs, and tore the scrotum completely across as though a knife had been used, the edges of the wound being perfectly even. The consequence was, the testes came *in situ*, and the scrotum retracted as far as it could. The testes on examination did not appear to have received any severe bruising, and, as prompt action was the remedy in such a case, I immediately set to work to relieve the patient. But I must tell you, before describing the treatment, that he walked to the surgery after the accident unattended, a distance of at least six hundred yards, although in such a condition, and suffering extreme agony. The first thing I did was to carefully draw the scrotum down, and press gently the testes into their original position; and after having done so, I introduced sutures to about seven in number, which brought the edges of the wound well together, and then applied adhesive plaster as much as necessary, and directly over that a silk suspensory bandage, and after all was arranged had the patient carefully conveyed to his own home. He was attended daily, but did not experience pain whatever afterwards, and after an attendance of about fourteen days he was cured, the wound having healed by the first intention.

Your obedient servant,
ALFRED SEPTIMUS PRATT,
Cardiff, Feb. 4th, 1873. Surgeon R.N. (Retired).

H. R. R.—There are no absolute fees for such services. We can only say that they are intrinsically very valuable. The actual charge made must be regulated by the means of the patient, the value of the surgeon's time, and the mode of his locomotion, on all which points we are uninformed. Our correspondent should charge well, but of the exact rate of charge he is a much better judge than we can be.

Student, (Uxbridge.)—Like many other popular ideas, it is probably a delusion.

THE DRUITT TESTIMONIAL FUND.

MR. HAYNES WALTON, the Treasurer, begs to acknowledge the receipt of the following sums since Wednesday, the 29th of January:—

Sir W. Jenner	£5	5	0	Miss Reed	£2	2	0
Mr. H. Cheswright	5	5	0	Dr. John Harley...	1	1	0
Mr. C. F. Oldham	5	0	0	Mr. R. N. Hitchings... ...	1	1	0
Dr. J. H. Evans, Birmingham	3	3	0	Mrs. H. Hitchings	1	1	0
Messrs. Jolley and Co. ...	3	3	0	Dr. Parker	1	1	0
Mrs. Honchen	3	3	0	Mr. Sydney Jones	1	1	0
The Hon. W. Cowper Temple	2	2	0	Dr. Charles Taylor	1	1	0
Dr. Basham...	2	2	0	Mr. Royes Bell	1	1	0
Mr. S. Cartwright	2	2	0	Mr. John Honchen	1	1	0
Mr. John Brady, M.P. ...	2	2	0	Mr. Henry Honchen	1	1	0
Mr. B. Holt	2	2	0	Dr. Ed. Seaton	1	1	0
Mr. J. Hutchinson	2	2	0	Dr. Fred. T. Roberts... ...	1	1	0
Mr. S. Lane	2	2	0	Miss F. B. Dickson	1	0	0
Dr. Radcliffe	2	2	0	Dr. D. King...	0	10	0

Subscriptions may be sent to the Treasurer, Mr. Haynes Walton, 1, Brook-street, Hanover-square; the Secretary, Mr. A. T. Norton, 6, Wimpole-street; or may be placed to the account of the "Druitt Testimonial Fund," Union Bank, Argyle-place, Regent-street, W. Amounts received will be acknowledged in the medical journals.

W. T. W.—The old Blackwall ships, owned by Messrs. Green and Wigram, are the best lines to Australia *viâ* the Cape. There is no work on the subject to which our correspondent could refer; but we believe that Mr. Harry Leach, of the Seamen's Hospital, Greenwich, could and would give all necessary information.

THE RECENT REVIEW OF DR. TILBURY FOX'S WORK ON SKIN DISEASES.

Dr. Tilbury Fox writes to us to say that his authority for the derivation of λεύκη, from the Greek word signifying "white," is Dr. White's Classical Dictionary, and the Dictionaries of Mayne, Hoblyn, and others; for the use of the word *pityriasis*, the Nomenclature Report of the College of Physicians; and for the designation *cimex lectularius*, Linnæus, Pliny, and others.

Hippocratidis, (Canterbury.)—In the Scotch Universities the preliminary examination for medical students includes five compulsory subjects: English, Latin, Arithmetic, Lower Mathematics, and Mechanics. The M.B. must take two and the M.D. three of the following optional subjects: French, German, Greek, Higher Mathematics, Natural Philosophy, Logic, Moral Philosophy.

Mr. Nutt.—The paper shall receive due consideration.

ARMY MEDICAL DEPARTMENT.

To the Editor of THE LANCET.

SIR,—What are the prospects of the different grades of the Army Medical Department at the present time? The administrative ranks seem to be pretty well satisfied with what they have already got—viz., moderately good pay and light work. The surgeon-major looks hopefully to some additional inducement to retire. The surgeon looks probably to the exalted condition of the surgeon-major, with its much increase of pay, and the nearer approach of a time when he can throw off the yoke of a thoroughly unpopular service. The assistant-surgeon is for the time aroused from his almost hopeless apathy by the probability of his promotion after fifteen years' service—fifteen years! the greater part of which is spent probably under the deteriorating influence of an unhealthy climate; his reward for this being 20s. per diem, and this small sum most wofully trenched upon by recognised claims made on account of regimental expenses and subscriptions. During the present year 1873, 24 surgeons will be promoted to surgeons-major, with an increase to the annual expenditure of the country of £1752; in 1874, 105 surgeons will be promoted to surgeons-major, increased expense £7665; in 1875, 55, increased expense, £4015; in 1876, 52, at an increase of £3796; and in 1877, 100, at an increase of £7300. Thus in the next five years, 1873 to 1877 inclusive, under the existing *régime*, an increase of expense for this one item in the Army Medical Department will demand an additional outlay of £24,528!

February, 1873. Yours, &c., J. S. G.

Mr. E. A. Adamson.—We do not know the address referred to; but our correspondent can have no difficulty in procuring the article which she mentions.

M.D., (Weymouth.)—The Act applies to the medical officers of the institution. The coroner was, we think, right.

THE communication of *Dr. Rattray, R.N.*, shall appear next week. It arrived too late for insertion in the present number.

A FALSE ALARM.

To the Editor of THE LANCET.

SIR,—I have enclosed a piece of Dutch cheese which on Saturday last induced serious symptoms of poisoning. Mother and three children partook of this cheese at noon. In the course of the afternoon they all suffered severely from vomiting and violent pain in the stomach. Under treatment the three children were well on Sunday morning; but the mother has not entirely recovered. There was not any purging. They have all been accustomed to eat cheese without any previous ill-effects.

Yours truly,
West-green, Tottenham, Jan. 21st, 1873. J. BUNTING, M.R.C.S.

*** No peculiar or disagreeable taste or smell could be detected in the sample. No poisonous fungi and no peculiar appearance of any kind could be observed under the microscope. During a very careful analysis, no trace of any mineral or vegetable poison was detected, though many were searched for. A considerable portion of the sample was finally given to a mouse. The mouse ate nearly the whole of it, without showing any after-symptoms of poisoning. At the end of a week the mouse was apparently as well as ever. The symptoms, therefore, ascribed to the cheese must have been due to some other cause.—ED. L.

Mr. Hart.—It is contrary to our custom to forward private answers. Let our correspondent consult some respectable practitioner.

Quærens.—We can find no advertisement of the description mentioned. Apply at 8mith and Co.'s, 52, Long-acre.

H. C.—It is impossible with the scanty evidence adduced to discuss the merits of the matter.

Mr. William Hoar.—The matter shall be investigated.

PRACTICE AT BERMONDSEY.

WE cannot give room for all the illustrations that reach us of the condition of things lately referred to by a correspondent at Bermondsey. One gentleman, styling himself "Dr. Scott," has his name in large type at the head of a bill, advertising a dispensary opened for the benefit of the working classes, where the best medical and surgical advice, including medicine, may be had for a shilling a week. The following label of a mixture presents a very ingenious use of "Doctors' Commons," and proceeds on the well-known power of a number of capital letters mysteriously associated together:—

"Mr. T. C. Balls, M.U.S.C.D.E., A.M.P.S.E., and M.B.E. (by certificates), registered March 2nd, 1863, at Doctors' Commons, and under the New Act, dated 31st July, 1858, No. 7836, according to (declarations) Schedules C and D of the above Act.

"From Messrs. Richmond Brothers, Surgeons, &c., of Star-corner, 2, Grange-road, Bermondsey, S.E. At home for consultation before 1 and after 6 o'clock. Established 1870."

THE RECENT WRECK OF AN ITALIAN BRIG AT BLYTH.

THE following highly gratifying letter, addressed by the Italian Marine Minister to Dr. Gilbert Ward, Blyth, has been forwarded to the latter gentleman by Sig nor E. Stella, the Italian Vice-Consul at Newcastle:—

Rome, 25th January, 1873.

SIR,—I have been officially informed that, on the occasion of the shipwreck of the Italian brig, *La Madre*, Captain Esposito, you aided and attended with the kindest possible care the survivors of the crew, and that you also refused to receive any remuneration whatever that was offered to you. This noble action does you very great honour, both as a doctor and as a man, and for which I beg to thank you in the name of the Italian Government. Please accept the assurance of my particular esteem. THE MARINE ITALIAN MINISTER.

(Signed) RIBOTY.

Mr. Geo. P. Field.—The conduct complained of was fussy and unprofessional, supposing the statement of our correspondent to be an accurate one. A medical man is not justified in going to see another's patient without previous intimation and permission, whether the patient be a coachman or the mistress of a coachman. A courteous statement of the facts, including a gentle complaint, to the lady, would, in our opinion, be quite justifiable, vindicating one's own course of procedure, and the right to have the principles of professional etiquette respected when attending a servant as when attending a master. In any case our correspondent has the satisfaction of having relieved his patient and earned his gratitude.

THE TREATMENT OF PYROSIS.

To the Editor of THE LANCET.

SIR,—I have a case of pyrosis which resists every means of treatment I can think of. I have tried soda, potash, hydrocyanic acid, oxide of silver, chalk, &c.; the latter gives the most relief, but is only for a short time. I shall be glad if any reader of THE LANCET can suggest any other remedy likely to be useful. Yours, &c.,

February 10th, 1873. AJAX.

A Young Practitioner.—The case described appears to correspond very closely with the description given by Dr. Eustace Smith in his work on "The Wasting Diseases of Children," and we would recommend him to read that chapter, which will doubtless supply him with some very useful hints as to diet and treatment.

Mr. M.'s communication shall be kept in mind.

A CORRECTION.

To the Editor of THE LANCET.

SIR,—Will you allow me to correct two errors in the latter part of my letter in your issue of Feb. 1st. For "under the side," read "under the *sole* of the instrument"; and for "to the side of the apparatus," read "to the *sole* of the apparatus." I am, Sir, yours, &c.,

Windermere, February, 1873. FREDERIC CLOWES.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. T. Holmes; Dr. Meadows; Dr. Robinson, Birmingham; Mr. Williams, Bonnarfaur; Mr. Burgess, Bow; Dr. Lyall, Leven; Dr. Lloyd, Lambeth; Dr. Shaw, Thorpe; Mr. Cooke, Scarborough; Mr. Atkins, Coventry; Dr. Robertson; Mr. Thomas; Mr. Cater, Sunderland; Mr. Feltham; Mr. A. K. Debenham; Dr. Davis, Aberdare; Mr. Stevens; Mr. Holman, Guildford; Mr. Vorley; Mr. Dawkins; Dr. Hardyman, Macclesfield; Dr. Oppenheim, Strasburg; Dr. Ball, Spalding; Mrs. Haygarth; Mr. Chambers, Brighton; Mr. Rowe, Tring; Mr. Harrison; Mr. Dyer, Macclesfield; Dr. Maclagan, Dundee; Mr. Hurlbutt; Dr. Chapman; Dr. Savage, Birmingham; Mr. R. J. Carey, Fenny Stratford; Mr. Hughlings; Mr. J. Tinley; Mr. Moore; Dr. Nutt, Bolton; Mr. Bonnington; Dr. Mackey, Birmingham; Dr. Pilkington, Chorley; Mr. Masterman, Burnham; Mr. Morland, Alfreton; Mr. Cotton; Mr. Rickards, Birmingham; Dr. O'Flanagan, Houghton Spring; Dr. Lee; Dr. Woodman; Mr. French; Mr. R. Talford; Mr. Colman, Toft Monks; Mr. R. Croker; Dr. D. Hooper; Dr. Stretton; Dr. Berens, Amsterdam; Dr. Pearless, Sevenoaks; Dr. Williams, Holyhead; Dr. McCall Anderson, Glasgow; Mr. Hoffering; Dr. Kidd; Mr. Vacher, Birkenhead; Mr. Poole; Mr. Groves; Mr. E. B. Brown; Mr. W. Jenner, Baldock; Mr. E. Harland, Lopham; Mr. Sexton, Beverley; Mr. Jones, Burnley; Mr. Gray, Chepstow; Mr. Webber, Huntingdon; Mr. Seaton, Norwich; Mr. Sampson, Shirley; Dr. Pierce; Mr. Seeley, Wellingford; Mr. Blackwood, Dover; Mr. Earle, Walsham; Mr. Riley, Malvern; Mr. R. Niven, Salisbury; Dr. Wilkinson; Dr. Webb; Mr. Jollye, Donnington; Mr. Batchelor, Stratford; Mr. Hall, Watford; Mr. T. Windsor, Manchester; Mr. G. Elkington, Edgbaston; Dr. Miller, Londonderry; Mr. Collinge, Leeds; Mr. Marsh; Mr. H. Perry, Oxford; Mr. Drinkwater, Llangollen; Mr. Abbott; Dr. Rattray, Dartmouth; Mr. Watkin; Mr. Menser; Mr. Eastes; Mr. Money; Mr. Clayton; Mr. Beeton; Mr. Hoar, Maidstone; Mr. Macrae; Mr. Edmonds; Dr. Bacon, Pultown; Dr. Macdonald; Dr. Black, Chesterfield; Mr. Gaines, Salford; Dr. Elliott, Waterford; Mr. Dale, Oldham; Mr. Parton; Mr. Ingram; Mr. Vasey, Liverpool; Mr. M. Hart; H. C.; B. R.; M.D., Weymouth; Obstetricus; M. R. C. S.; A. B. C. D.; An Associate of King's College; H. R.; Nemo; R. A.; J. R.; Ajax; Studens; A. C. R.; W.; Inquirer; Quærens; Medico; &c. &c.

Tamworth Herald, Daily Chronicle, Ulster General Advertiser, Porcupine, Peterborough Advertiser, Dublin Journal of Medical Science, Scarborough Gazette, Public Opinion, El Anfiteatro Anatómico Espanol, Yorkshire Post, Canada Medical and Surgical Journal, Toronto Leader, Journal of the Gynæcological Society, Northern Echo, Anti-Tobacco Journal, and *Chicago Medical Examiner* have been received.

Medical Diary of the Week.

Monday, Feb. 17.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Flower, "On the Osteology and Dentition of Extinct Mammalia."
MEDICAL SOCIETY OF LONDON. — 8 P.M. Clinical night. — Mr. Bond, "On Excision of a portion of the Metatarsal Bone." — Dr. J. T. Dickson, "On a Case of Trephining in Epilepsy." — Mr. Teevan, "On so-called Irritable Bladder."—Mr. Nelson Hardy: "A Case of Frontal Anæsthesia, and loss of Parallelism between the Eyes, caused by the presence of two pieces of Glass within the Orbit."—Mr. Pennefather: Instruments.

Tuesday, Feb. 18.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL INSTITUTION. — 3 P.M. Professor Rutherford, "On the Forces and Motions of the Body."
PATHOLOGICAL SOCIETY OF LONDON.—8 P.M. The following Specimens will be exhibited:—Malformation of the Heart; Urinary Calculi from India; Drawings of Elephantiasis Arabum; Cancer of Duodenum and Gall-bladder; Tumour of the Femur; Melanotic Sarcoma of the Liver; Fibro-cystic Tumour of the Right Ovary; Fibrous Tumour of the Ovary; Papilloma growing in the Fourth Ventricle; Surgical Kidneys; Syphilitic Phthisis; Specimen of Intussusception; Epithelioma of the Epiglottis and Base of the Tongue; &c. &c.

Wednesday, Feb. 19.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
CANCER HOSPITAL.—Operations, 3 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Flower, "On the Osteology and Dentition of Extinct Mammalia."

Thursday, Feb. 20.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Dr. Armstrong, "On the Formation of Organic Substances."
HARVEIAN SOCIETY OF LONDON.—8 P.M. Mr. Cripps Lawrence: "Remarks on some forms of Infantile Diarrhœa."

Friday, Feb. 21.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Flower, "On the Osteology and Dentition of Extinct Mammalia."
MEDICAL MICROSCOPICAL SOCIETY. — 8 P.M. Mr. E. A. Schäfer, "On the Structure of Voluntary Muscular Fibre." — Dr. U. Pritchard, "On the Cochlea."
ROYAL INSTITUTION.—9 P.M. Prof. Clerk Maxwell: "Action at a Distance."

Saturday, Feb. 22.

HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 9 A.M. and 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Dr. Freeman, "On Comparative Politics."

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